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AMERICAN ARTISAN Tardware Record

Vol. 81. No. 4.

620 SOUTH MICHIGAN AVENUE, CHICAGO, JANUARY 22, 1921.

\$2.00 Per Year.

The PARKER METAL PUNCH

No. O. X.

Greater Punching Power Than Any Tool of Its Size



COMPACT-Measures only 8 inches

LIGHT ——Weighs but 25 lbs.

POWERFUL-Capacity a 47 hole in 16 ga. steel; or equivalent.

Besides the fact that it is made of O. H. Drop forged steel, to withstand rough usage, it has many distinct and exclusive features. Ease and speed in the changing of Punches and Dies; Front Pointer and Side Gauge combination, which eliminates center-punching; and small cost for maintainance.

The PARKER METAL PUNCH

No. XX

"Take the Punch to the work, or the work to the Punch"



A combination Bench and Hand Punch of a greater range of work than the No. O. X. Punch.

Constructed on the same principle of applied force, allowing of compactness coupled with greater punching power.

Measures 9" over all.

Weighs about 41/2 lbs.

Capacity: A 17/32" hole in 20 gauge steel, or equivalent.

This Tool is fast becoming popular with the trade, and will help to complete your shop equipment.

PARKER HARDENED SHEET METAL SCREWS



Save fully 75% time and labor by their use for joining sheet metal, and making fastenings to metal.

Eliminates in a good many instances the use of Stove Bolts, Tap Bolts and other costly means of operation. No holes to tap; no nuts to put on.

Just punch or drill a hole in the sheets you intend joining and with a screwdriver turn up flush with the head. You'll have a better fastening in a fraction of the time and labor. Once put in, they stay "put."



There is a Jobber of PARKER PRODUCTS in your territory. If you don't know who they are, your request will bring the information.

PARKER SUPPLY COMPANY, Inc.

Manufacturers of PARKER PRODUCTS

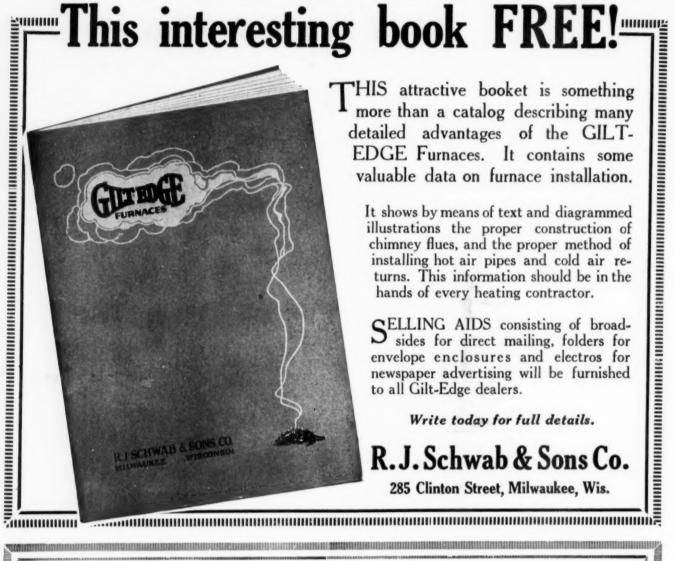
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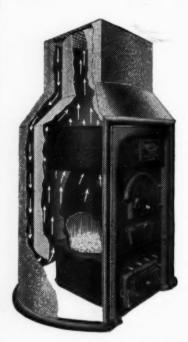
NEW YORK

Published Weekly. Entered as Second-Class Matter June 25, 1885, at the Post Office at Chicago, Illinois, under Act of March 3rd, 1879

ALPHABETICAL INDEX AND CLASSIFIED LIST OF ADVERTISERS, Pages 41 to 43

his interesting book FREE!





PEERLESS GRAVITY PIPELESS HEATER

NEW improved furnace built as good as it looks, simple and yet complete in every detail. Made for Western trade and Western fuels.

The price is consistent and deliveries prompt. The right furnace for you.

"THE STANDARD PEOPLE SELL STANDARD GOODS" A line from you will bring our catalogue.

STANDARD FURNACE & SUPPLY CO. OMAHA, NEBRASKA 407-13 South 10th Street

FOUNDED 1880
BY
DANIEL STERN
Thoroughly Covers
The Hardware, Stove,
Sheet Metal, and Warm
Air Heating and Ventilating Interests

AMERICAN ARTISAN Hardware Record

Address all communications and remittances to

AMERICAN ARTISAN
AND
HARDWARE RECORD

620 South Michigan Avenue Chicago, Illinois

PUBLISHED EVERY SATURDAY BY ESTATE OF DANIEL STERN

TERMS OF SUBSCRIPTION IN THE UNITED STATES AND ITS POSSESSIONS (Invariably in Advance) One Year Postage Paid \$2.00
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CHICAGO, JANUARY 22, 1921.

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The washing machine manufacturers who are members of the American Washing Man-

Worth While Educational Campaign ufacturers' Association have reason to congratulate themselves upon the work which is being done by their executive office under the supervi-

sion of Secretary E. B. Seitz and more directly under the direction of Miss Keown, a very efficient young lady who certainly knows how to get women interested enough in washing machines to induce them to have their husbands buy these fine labor-saving appliances.

It is just eight months since this work was begun, and it was a matter of building up from the bare ground—laying a foundation, first, as a matter of fact.

So it is really remarkable that so much has already been accomplished, as was shown in the very interesting report rendered by Miss Keown at the annual meeting of the Association held this week in Chicago.

A very definite educational campaign has been organized in fourteen states, through the cooperation of the Agricultural Extension Departments, of both state and federal governments, as well as through the Home Economics Departments of hundreds of colleges and normal schools.

Actual campaigns have been instituted in many sections by which the housewives and their husbands have had the truly great labor-saving qualities of the modern washing machine presented to them in such a manner that many sales can be traced directly to these demonstration meetings—held as they are, not under the auspices of some dealer or manufacturer, but under the guidance and sponsorship of the organizations of the "best" women in the community.

As an example of the result that can be expected from this work, Miss Keown cited

the case of a locality in northern Mississippi, where there is a large number of wealthy families. They got their "colored sisters" interested and several of these have already bought electric washing machines with which to do the weekly laundry work for these families, instead of in the old fashioned wash-board-and-tub manner.

The American Washing Machine Association is a pioneer in such educational work, and great credit is due to the men who conceived and carried out the plan, not leaving Miss Keown and her able assistants without praise, however, for they did the actual work in a manner which showed high appreciation of the ideal for which they labored.

And the best of it is that while of course it is done for the purpose of increasing the demand for and the sale of washing machines, the housewife who is induced to secure one of these appliances is thereby freed from the hard back-breaking labor which always used to come with the weekly wash

Incidentally, every hardware dealer who is now selling washing machines is sharing in the benefits accruing from this highly efficient campaign, and it is up to them to take the full advantage of this work by pushing the sale of these great labor-saving appliances.

A hardware dealer has reason for congratulating himself every time he sells a washing machine—not especially because he has made a profitable sale, but rather because he has thereby liberated some woman from a large share of her hard housekeeping duties.

It is a matter of congratulation also that the Association was a unit in voting to continue the good work so well started, and to broaden the activities to such an extent that before the end of 1921 probably the entire United States will be covered even more effectively than the fourteen states in which the campaign was conducted during 1920.

In the meantime, such hardware dealers as are not now selling washing machines may well take steps to secure the local agency for one of the many good makes, and it is worthy of note right here, that although the individual members of the Association have a natural desire to extend their business to the greatest possible degree consistent with safety, still it is not every applicant for a distribution franchise whose petition is granted.

But reliable hardware dealers who are showing aggressiveness in their present business are the kind that are sought for the washing machine agency—and those who belong in that class can reap big returns by adding washing machines to their line.

.

For the past few months, Mr. Lugubrious Blue has been driving us hard. He has oc-

Pessimist
Is Taking
Back Seat
Once More.

cupied the driver's seat on our business wagon and has used the whip on us every minute—with the result that none of us was able for a while to do anything else

than jump whenever he cracked the whip. We cancelled orders for supplies. We stopped advertising. We quit buying. We even refused to sell, because we were afraid that we would not get paid for what we might ship. The season of hard times we were going into was simply the worst that

And yet-

had ever happened--

Mr. Blue failed to deliver the goods.

There has been no panic. There has been no general withdrawal of bank deposits. The number of failures and bankruptcy cases has really been surprisingly small when you come to count them up.

And now-

Mr. Blue is on the back seat, taking up very little room, indeed.

For buying has commenced. Wholesalers of hardware are placing orders, because otherwise they would not be able to fill the orders that are coming in from retailers.

As a result, the manufacturers of tools, housewares, washing machines, vacuum cleaners, stoves—and all the other items

that are classed as Hardware—are now beginning to operate at somewhere near a profitable basis.

Just as it was the bankers who put Mr. Blue in the driver's seat last summer, so they have now pulled him off and put "Conservative Optimism" in his place, as is evident from the address of W. P. G. Harding, Governor of the Federal Reserve Board, delivered before the New York State Bankers' meeting recently, in which he said:

"I have always been impressed by an old saying which, I believe, is one of the many bits of wisdom attributed to Confucius: 'Things are never as good or as bad as they seem.' While this philosophy is too often overlooked in boom times, it should always be taken to heart in the periods of reaction which follow. I am sure we have all heard more pessimistic talk during the last six months than we usually hear in ten years and if I may be permitted to use an overworked term the 'psychological effect' on public sentiment has much to do with molding actual conditions.

"It is evident now that the readjustments which have taken place were inevitable. Great wars have invariably caused great expansion and periods of great expansion have always been followed by severe reaction. But present conditions justify some conclusions which ought to encourage and hearten us all. Our banking position is sound and stronger than it has been for many months. Public sentiment today undoubtedly approves of working back to normal.

"Whatever danger of crisis there may have been has passed.

"Gloomy forebodings have given way to a feeling of conservative optimism and restored confidence."

Governor Harding is not in the habit of talking "for publication." His statement is, therefore, of still greater importance, and the average business man, such as the progressive hardware dealer, can well afford to go by the suggestion contained in his remarks—that now is the time to prepare for the business which is bound to come within a very short space of time—that the only way to prepare is by placing orders for fair quantities of such items as are seasonable for Spring and early Summer business.

Random Notes and Sketches By Sidney Arnold

W. H. Cloud, Secretary Southern Stove Manufacturers' Association, and B. E. McCarthy, member Executive Committee of the Association, and President Phillips and Buttorff Manufacturing Company, Nashville, Tennessee, paid me a friendly call this

* * *

I enjoyed a visit early in the week from E. W. Norman of Merchant and Evans Company, President Indiana Salesmen's and Jobbers' Auxiliary to the Indiana Sheet Metal Contractors' Association, J. V. Armhorst of the Chicago office of Merchant and

Evans Company, and A. J. Becker of the Ohio Valley Roofing Company, Evansville, Indiana.

"Oh, yes! Swell affair."

"Did you see a good deal of the young debutante?"

"Well, yes, I believe I saw most of her!"

Pat-Moike, why is kissin' your gurril loike a bottle ov olives?

Moike-Give it up.

Pat—Cause ef yez can git one the rest come aisy. 2|c 2|c

"Some of these so-called efficiency experts get my 'Nanny'," said Harry Van Bayse, of the American Furnace Company, to me the other day, while we were having lunch together. "I believe in getting things done in as systematic and profitable a manner as is possible, but sometimes I just lose patience with these 'know-it-all' fellows, who without really knowing anything about your business presume to be able to tell you on short notice all that is wrong with you and what you should do in order to remedy the fault-which of course includes paying them a nice, juicy fee.

"For example, I know a business man who was persuaded by one of these 'Experts' that a tremendous waste was caused in his store because the sales people did not save the strings that were tied around packages received from manufacturers and the old wrapping paper. He even went so far as to have his errand boy equipped with a small anvil on which he straightened the pins that had been used in making window displays. The boy also was instructed to save the narrow strips of paper that you notice along the edge of every sheet of postage stamps. The shavings contained in the pencil sharpener were dumped into a receptacle every morning and carried by the boy every so often to the furnace room and the janitor was instructed to use them as fuel.

"Nothing was allowed to go to waste. But, somehow, the business did not seem to become more profitable; in fact, the man failed-and in my opinion, his failure was due in a large measure to his inability to distinguish between real efficiency and the make-believe kind."

When people ask your advice they merely want to find out if you have sense enough to indorse their own views.

"My wife watches the sugar market closely."

"Speculating?"

"In a small way. She borrows when it's high and pays back when it's low."

"Three cents for a newspaper? It's grand larceny."

"Thirty-eight cents for gas? Never! Never! Never!"

"Fifty cents to a barber? Not me."

"The 8-cent fare is a nuisance to our inalineable rights."

"If he depended on me, the clothing profiteer would be starving in a garret."

"Are you sure it's the real stuff for only \$90.00 a gallon? I'll take all you've got."

"Did you give this man the third degree?" asked the police officer.

"Yes. We browbeat and badgered him with every question we could think of."

"What did he do?"

"He dozed off and merely murmured now and then, 'Yes, my dear. You're perfectly right'."

Edith Wharton, the writer, tells this war story:

"The American wounded were being brought in from the Marne battle, and a fussy woman in a khaki uniform and Sam Browne belt knelt over a stretcher and said: 'In this case an officer or only a man?'

"The brawny corporal who stood beside the stretcher gave her a grim laugh and said: 'Well, lady, he ain't no officer, but he's been hit twice in the innards, both legs busted, he's got two bullets in both arms, and we dropped him three times without his lettin' out a squeak, so I guess ye can call him a man."

If men were compelled to eat their words there would be an epidemic of indigestion.

Tim-Say, Jim, what's the difference between a soldier, young ladies and an Italian fruit stand?

Jim-I don't know. Give it up. What's the answer? Tim-The soldier faces powder and young ladies powder faces.

Jim-Yes, but where does the Italian fruit stand come in?

* * *

Tim-Oh, that's where you get your lemon.

A dog chasing his tail is the wisest of philosophers in comparison with the man who grumbles against conditions which he can not change. Instead of complaining about disagreeable things, it is better to adapt yourself to circumstances which you can not control. The greater part of the inconvenience which irks you will fade away if you look at things from the point of view of these verses:

My Friend.

When from the skies the rain torrential drops, My friend remarks: "Fine weather for the crops!" When from the East a chill wind loudly roars, He smiles and says: "Fine day to stay indoors!" When from the sun the heat streams fervently, Says he: "Just right to sit beneath a tree!" And when skies hesitate "twixt rain and shine, He sits and smiles and softly murmurs: "Fine!" In short, whatever the weather's state or whim, Each day that comes is somehow "Fine" to him. With the result, no matter what may hap, By day or night he is a sunny chap! day or night he is a sunny chap

Kusel's Sell Stoves and Ranges Because They Know That There Is Good Money in Them.

Watertown, Wisconsin, Hardware Dealers Have Built Up Large Stove Business by Constant Advertising.

The traveler who stops in Watertown, Wisconsin, will have his attention called to the hardware store of D. & F. Kusel Company which has been in operation in that town for many years, but which, unlike many others, is still growing and showing every sign of keeping on growing.

There is an atmosphere about this store of Kusel's which gives the stranger, somehow or other, the feeling that whatever he may buy there will be all right—he can be reasonably certain that it will turn out satisfactorily; also that if by chance it should prove unsatisfactory, the trouble will be rectified to his satisfaction.

It is an easy matter to destroy confidence-just as easy as it is difficult to build up confidence-and Kusel's are extremely careful that nothing shall be said or done by themselves or their employes to injure the reputation for fair dealing which they have earned during the many years they have been in business. They will go to any length to retain and to strengthen the confidence their customers have in them and in the goods they sell.

One of the important points on which this confidence has been built up is that of "Service." If a promise is made that a kitchen range will be delivered and set up in time for supper tonight, that range will be in working order and in place in plenty of time for Mrs. Housewife to have a full meal cooked by the regular supper hour. That

ular supper hour. 'That is the sort of "Service" Kusel's render.

That is also one of the reasons for the big business this old, progressive organization of real hardwaremen is doing on kitchen ranges, stoves and other heating appliances. People in and around Watertown for many miles have come to know that whatever Kusel's say about a stove or kitchen range—or about anything else that they sell—can be fully depended upon. So there is no risk involved by the customer when he buys.

Kusel's sell the Great Majestic Range, Favorite Heating Stoves and New Perfection Oil Cook Stoves. They say that they picked these three makes because they wanted to show a strong line in each kind, rather than picking one or two numbers out of one make, another couple of numbers from another make and still another couple from some other manufacturer.

Last fall they held a Demonstration and Bargain Sale on Majestic Ranges which was a big success. This, by the way, is a regular annual feature of their stove sale promotion, and every year it shows bigger results—partly because of the number of satisfied buyers that are steady boosters for them, both before and during the sale.

Mr. Kusel outlines in the following some of the more

important principles which have guided him and his associates in the building up of their fine stove business:

"We decided many years ago the only basis on which we would sell stoves—or anything else in our store—should be, the best possible value for the money consistent with conditions of the market. We did not care to sell the very low priced lines, because we did not feel that we could recommend them under any circumstance

"For no matter how cheap the price might be, the customer would be sure to be dissatisfied when the stove top began to warp, or when the oven sides showed signs of burning through. So we have always talked quality rather than mere low price, although we do sell our stoves on a very low

margin of profit, everything considered.

"When the season opens up we make a strong effort to have it start off with a rush. In other words, we make it an object for our prospective customers to buy early, so that we may secure a fresh lot of boosters.

"There is quite a good deal to this point—more than the average person might think. But just think of this: Isn't it a fact that when Mrs. Jones buys a new coat or suit or hat, she is quite anxious to have all her friends and neighbors see and admire it?

"And it is exactly the same way when she buys a new kitchen range or heating stove. Every one of her bosom friends is informed that she has a new



And let us show and explain to you the many Majestic features of su periority.

Figure 1.—Reproduction of Full Page Stove Advertisement in Eight-Page Folder of D. & F. Kusel Company, Watertown, Wisconsin. Size of Page 10x13½ Inches.

Come to Our Majestic Range Demonstration!

Majestic Range or Favorite Heater, and asked to come over and see how fine it looks and how excellent it is for baking and cooking or for heating.

"As a matter of fact, a large portion of our stove sales are made as a direct result of the recommendation they receive from satisfied customers of ours, who are so pleased with their purchases that they like to tell their friends and neighbors about the fine range or heating stove that they just bought at Kusel's.

"Many and many a customer has told me after the sale was made that she was induced to buy a Majestic Range very largely by what one of her neighbors had told her about its fine baking and roasting oven, or the ease with which the fire could be kept, and so on.

"The principal cause for our big success in the stove

business is, of course, the quality of the line we sell, but no matter how good that line may be something else is required: You must let the people in your community know that you are selling Majestic Ranges, and you must keep on telling them.

"That is one of the chief troubles with the hardware business: Too many retailers of hardware do not adver-Sometimes I tise. am inclined to say that they do not believe in advertising, but maybe that is too strong a statement. At any rate, if they believe in advertising, they fail to act on their belief, and you know what the Good Book says in regard to faith -'Show your Faith by your Actions,' or something to that ef-

"If every hardware dealer would become a steady and intelligent advertiser, I am firmly convinced that drug stores would quit selling safety razors and that dry goods stores would not be selling pocket knives and scissors. Cutlery belongs in a hardware store, just as much as nails and hammers do, and the great bulk of the cutlery business ought to be done by the hardware dealer, instead of by the dry goods merchant or the druggist.

"But to get back to the stoves—we believe that we have an excellent line of ranges and heating stoves. It may not be the best in the market, but we think so well of the line we sell that we have no hesitancy in

standing back of them in every particular—and that means a lot to the purchaser who has confidence in the dealer from whom she buys. The manufacturer is a long way off, you know, and if anything goes wrong, it is the dealer who has to make good. If he does not believe thoroughly in the line that he is selling, he is more than likely to slip up on the sale, and if he does make the sale and something goes wrong, he is also likely to try to 'fix it up' without really satisfying the customer.

"So the first point in picking a line of stoves is to make sure that you can afford to recommend it. Then you will have confidence—the kind of confidence that communicates itself to the prospective customer.

"In other words, you must 'sell yourself on the line,'

or you will have a hard job of selling your confidence to Mrs. Housewife.

"We have a couple of men who make a specialty of stove selling. They can take a range apart and set it up again. They know every part of it and why it is there. They can explain the 'why and wherefore' of every feature of our ranges.

"These men did not learn this important factor of salesmanship in a day or a week. They studied stoves, just like a young fellow studies bookkeeping or mechanics, and they make it a point to learn all they can about the stove business whenever they have a chance. That is why they sell so many stoves, and that is one of the reasons for our big stove business.



Figure 2.—Full Page Advertisement of Cooking and Other House-keeping Utensils. Published in Eight-Page Folder of D. & F. Kusel Company, Watertown, Wisconsin. Size of Page 10x13½ Inches.

"Whenever we have a stove demonstration, like the one that is advertised in the first illustration, we always combine a sale of cooking utensils with it, and the business in both departments shows a big increase.

"Summing it all up, the most important points of the stove business are these:

"I. Pick out a line that you have confidence in, and stick to it.

"2. Be liberal with your display space. Don't crowd your stoves so close together that the customer can not get around it.

"3. Be specific in your statements. Know the stove you sell. Don't overstate.

"4. Advertise your line and keep it up."

D. & F. Kusel Company have been consistent advertisers for many years. They are publishing at this time an eight-page folder each page of which is $10x13\frac{1}{2}$ inches. The two illustrations shown herewith give a good idea as to the manner in which their advertising is attended to. Both are reproductions of full page advertisements in this folder.

Samuel H. Jacobs Is Now Convalescing at Home.

It was a hard siege and many times during its course it seemed a losing fight. But the indomitable



Samuel H. Jacobs, Vice-President and General Sales Manager The Fanner Manufacturing Company.

will of Samuel H. Jacobs, Vicepresident and General Sales Manager The Fanner Manufacturing Company, Cleveland, Ohio, gained the victory.

He was able to leave the hospital, Saturday, January 15th, and is now convalescing at his home, 1888 East 81st Street, Cleveland.

Indeed, he has already made such progress on the road to complete health that he hopes to be able to call on his friends in the stove trade in about three months.

In the meantime, it would greatly hearten him to receive cheering letters from his numer-

ous friends who read this news of his fortunate recovery.

Few men have done more toward developing the spirit of fellowship in the stove trade of America than Samuel H. Jacobs. He has been untiring in his efforts for the upbuilding of organization and the promotion of practical cooperation among stove manufacturers and dealers.

His return to activity will be hailed with pleasure by his friends and associates.

Publishes Attractive Catalog of Oil and Gasolene Stoves.

The 1921 catalogue of "Clark Jewel" Oil Stoves and Gasolene Stoves, issued by George M. Clark and Company, Division American Stove Company, Chicago, Illinois, is beautifully illustrated, some of the pictures being in three colors.

It is printed on heavy, glossy paper, with gray covers done in green and red.

Accurate and clear descriptions are given throughout the catalogue, so that the illustrations are doubly effective.

Two pages of the catalogue are used to present the "Clark Jewel" Gasolene Blow Torches, with brief details.

The last page shows four attractive advertising cuts, which are but a few of those furnished free by George M. Clark and Company to their customers.

Other advertising helps which the Company is prepared to furnish to dealers consist of circulars printed in colors, signs for walls or windows, lantern slides, and window cards.

Copies of the new catalogue and details concerning advertising helps can be obtained by addressing a request for them to George M. Clark and Company Division American Stove Company, 179 North Michigan Avenue, Chicago, Illinois.

Bridge and Beach Manufacturing Company Elects Officers.

At the stockholders' meeting of the Bridge and Beach Manufacturing Company, St. Louis, Missouri, held January 18th, the following directors were reelected: Hudson L. Bridge, Leo H. Booch, Henry C. Hoener, John F. Shepley, Louis H. Riecke, Laurence D. Bridge, and George Leighton Bridge.

The Board of Directors elected the following officers: Hudson E. Bridge, President and Treasurer; Leo H. Booch, Vice-president and Manager; Henry C. Hoener, Vice-president; Louis H. Riecke, Secretary; George Leighton Bridge, Assistant Secretary; A. F. Gammeter, Assistant Treasurer; and Laurence D. Bridge, Assistant Treasurer.

Western Stove Manufacturers Are Strongly Optimistic.

A special meeting of the Western Central Association of Stove Manufacturers was held Thursday, January 13th, in the Congress Hotel, Chicago, Illinois, to discuss trade conditions and the outlook for the continuance of prosperity.

Without a single exception, every manufacturer present was firmly of the opinion that America is about to enter upon a new era of prosperity, greater in some respects than any that have passed.

Allen W. Williams, the efficient secretary of the Western Central Association of Stove Manufacturers, summed up the tone of the meeting by saying that we have all the necessary materials for continuous prosperity in America.

Samuel Kahn Dies on Train En Route to Chicago.

Samuel Kahn, of the Estate Stove Company, Hamilton, Ohio, was found dead in his berth, when the train on which he and Mrs Kahn were traveling, pulled into Chicago, on Thursday morning, January 20th.

While his sudden demise comes as a great shock to his many friends, Mr. Kahn had been in poor health for some time, and he was on his way to California where it was expected that he would recuperate.

Mrs. Kahn made arrangements to have the remains prepared for interment and shipped back to Cincinnati where Mr. Kahn has lived for many years at 731 South Crescent Avenue.

The sympathy of Mr. Kahn's wide circle of friends and business acquaintances will go out to Mrs. Kahn and his relatives in their loss of a loving husband and a man of many sterling qualities.

If a man deceives you once, shame on him; if twice, shame on you. Once is enough for experience.

The Week's Hardware Record

What Retailers, Jobbers, and Manufacturers Are Doing. Latest Selling Methods. Experiences of Successful Men.

Wisconsin Retail Hardware Convention Program.

Great care has been taken to make especially helpful the program of the annual convention of the Wisconsin Retail Hardware Association, which is to be held February 2, 3, and 4, 1921, in the Auditorium, Milwaukee, Wisconsin. The schedule of the sessions is as follows:

Wednesday, February 2, 1921.

Auditorium. Main Arena Juneau and Kilbourn Halls. Opening of Hardware Exposition. Everything in place.

Auditorium. Engelmann Hall. Community Singing—Miss Lois G. James, Leader. Annual Meeting of Hardware Dealers' Mutual Fire Insur-

Annual Meeting of Hardware Dealers' Mutual ance Company.
Reading of Minutes of Last Annual Meeting.
Report of President O. P. Schlafer.
Report of Secretary-Treasurer P. J. Jacobs.
Report of Auditors.
Election of Three Directors for Three Years.
Amendment to Articles of Incorporation.
Question Box—Fire Insurance.
Adjournment.

Adjournment.

11:00 a. m.—

Annual Meeting of Hardware Mutual Casualty Company.
Reading of Minutes of Last Annual Meeting.
Report of President O. P. Schlafer.
Report of Secretary-Treasurer P. J. Jacobs.
Report of Auditors.
Election of Three Directors for Three Years.
Question Box—Casualty Insurance.
Adjournment.

Adjournment.

Adjournment.
200 p. m.—
Auditorium. Engelmann Hall.
Community Singing—Miss Lois G. James, Leader.
President's Message.
Announcement of Committees.
"Excess Profits," by J. M. Campbell, Bowling Green, Mis-"Group Meetings" and "Credit Bureaus."

Actual Sales Demonstration: "Selling High Grade Paint to a Catalogue House Customer," by Clyde Hiers, Ap-

to a Catalogue House Customer, by Clyde Trees, 12, pleton.

4:00 p. m.—
Adjournment.
All members of committees are requested to remain in Convention Hall and organize immediately after this session and be ready to report.

Quarterly Meeting of Directors of both Insurance Companies

panies. 6:00 p. m.-

Exposition closes for the day.

8:00 p. m.—
Theatre Party, Majestic, Grand Avenue. This party is given by the Hardware Jobbers and Manufacturers of Milwaukee. Tickets may be had at the Office of the Section of the window to the right of the entrance to Juneau Hall.

Thursday, February 3, 1921.

9:00 a. m.-Auditorium. Main Arena, Juneau and Kilbourn Halls. Exhibitors ready to take orders.

10:00 a. m.-

Auditorium. Engelmann Hall.
Community Singing—Miss Lois G. James, Leader.
Question Box.
General Assembly. Matters pertaining to the welfare of
every Hardware merchant will be discussed by members. No stenographer present.

No stenographic 2:00 p. m.—
Auditorium. Engelmann Hall.
Community Singing—Miss Lois G. James, Leader.
"The Income Tax Report," by Prof. F. H. Elwell, University of Wisconsin.
"Rusiness in the Reconstruction and Readjustment," by Richmond, Virginia.

"Business in the Reconstruction and Readjustment," by Norman H. Johnson, Richmond, Virginia. Actual Sales Demonstration: "Selling a Range to Every Prospect," by A. J. Nielsen, Eau Claire.

Your attention is directed to an exclusive feature of AMERICAN ARTISAN AND HARDWARE RECORD.

It has the distinction of being the only publication which gives Western hardware and metal prices corrected weekly. You will find these prices on pages 36 to 41 inclusive.

0 p. m.— Adjournment.

Committees will find typewriters and adding machine in Secretary's Office at the foot of stairway leading to Engelmann Hall.

8:00 p. m.— Auditorium. Auditorium. Main Arena, Juneau and Kilbourn Halls. Music by orchestra in all Exhibit Halls. Exposition at its best. Bring your friends.

10:00 p. m.-

Exposition closes for the day.

Friday, February 4, 1921.

9:00 a. m.— Auditorium. Auditorium. Main Arena, Juneau and Kilbourn Halls. Last morning of Hardware Show. Exhibits will remain in place until 3:00 p. m.

Auditorium. Engelmann Hall. Community Singing—Miss Lois G. James, Leader. Report of Committees 2, 3 and 4.

Question Box.
It is planned to divide the assemblage this morning into It is planned to divide the assemblage this morning into three groups: each group to have a separate room where questions can be discussed freely without feeling that it is necessary to make a speech.

Dealers from towns of 10,000 population and up will make up one group—from 1,000 to 10,000 another and those from the smaller communities still another. There will be no stenographer present.

300 p. m.—

Auditorium. Engelmann Hall.

Community Singing—Miss Lois G. James, Leader.

Reports of Committees 5, 6 and 7.

Election of Officers.

"The Hardware Highway of Success," by Capt. John W.

The Hardware Highway of Success," by Capt. John W. Gorby, Waukegan, Illinois. Adjournment.

00 p. m.—
Meeting of Executive Committee and Officers.

Buys Patent Rights of the Red Devil Sprayer.

Patent rights of the Red Devil Sprayer, manufactured in the past by its patentee for use on golf links and for other spraying purposes, have been purchased by the Cincinnati Screw Company, Cincinnati, Ohio, manufacturers of a complete line of screws.

Production on a quantity basis will be begun in the near future. An extensive sales and advertising campaign is in course of preparation.

Get Acquainted with Your Stock.

It is too much to expect that the average store can afford to take more than one complete inventory each

At the same time, there is every reason why the stock now on hand should be gone over with considerable care within the next week or two.

Good Ideas for Window Display

Practical Lessons from Exhibits in AMERICAN ARTISAN AND HARDWARE RECORD Window Display Competition. How to Get More Passers-By to Come into Your Store.

MAKES GOOD WINDOW DISPLAY FOR CLEAN-UP WEEK.

Connecting a window display with some special advertising campaign enhances its power of attraction.

Naturally, we pay more regard to the things which are uppermost in our thoughts.

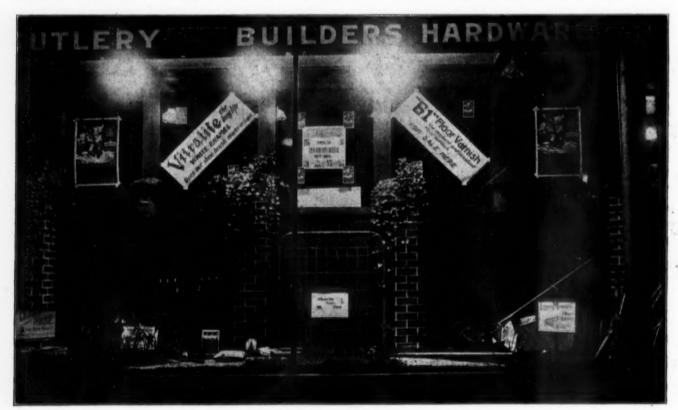
For example, the man who is interested in oil wells likes to read and talk about them.

You can get his attention more quickly by introducing that subject than by speaking about Einstein's ing been used extensively in newspaper and billboard advertising.

Consequently, it required less concentration on the part of those who stopped to look into the window to grasp their significance in connection with the goods on display.

Moreover, the artistic design of this window exhibit served to heighten its selling appeal.

The brick pillars were made of paper over wooden frames. The wire fencing was straightened and hung to screw eyes in the framework.



Window Display of Paints and Other Things for Clean-Up Week, Arranged by E. A. Saur, 1410 Yale Place, Minnesota.

theory of relativity or the latest development in plastic surgery.

Furthermore, it is easier to gain the notice of the passer-by for a display of commodities which have evident reference to a slogan which has been impressed upon his mind by intensive publicity.

The effectiveness of the window exhibit shown in the accompanying picture derives from the "Clean-up" campaign which was being carried on in the city when E. A. Saur, 1410 Yale Place, Minneapolis, Minnesota, arranged and installed this display of commodities.

Prominence was given in the window to the signs furnished by the Clean-up Week Committee of Minneapolis.

The wording and illustrations of these signs were already familiar to the people of that city from hav-

The gate was fastened to the pillars with bolt hinges. Real sod and crushed stone were used for the walk.

Mr. Saur is to be commended for the sense of proportion which guided him in confining the paint manufacturers' advertising helps to a few striking posters.

Sales of paints, varnishes, and other commodities adaptable to the purpose of Clean-up Week were much increased during the time that this window display was on exhibit.

Window Display Competition Is Helpful in Suggestions.

Not even Shakespeare was able to originate ideas without suggestions outside of his own mind.

Most of his plays are adaptations of older tragedies and comedies.

The greatest genius who ever lived, be he inventor, poet, or scientist, had to use existing ideas, experiences, and, from the suggestions of them, evolve new combinations of knowledge.

Don't fool yourself into thinking that you can originate anything without taking advantage of suggestions coming to you from other men's work and achievements.

The big thing, therefore, in the Window Display Competition conducted by American Artisan and Hardware Record is that it supplies a wealth of suggestions for making profitable window displays.

That is the chief reason why you ought to take part in the competition.

The time remaining before its close is short.

Resolve this very day to prepare a window display for entry in the contest.

Go back over your files of American Artisan and Hardware Record and study the photographs of window displays already published. Read the articles on the subject.

Jot down on paper the suggestions which come to you as you read and study them. Then put the suggestions into profitable window displays.

Here are the simple rules governing the competition:

Award of Prizes.

The prizes will be awarded as follows:

First prize, \$50.00 in cash, for the best photograph and description received of window display of hardware or kindred lines;

Second prize, \$25.00 in cash, for the photograph and description second in merit;

Third prize, \$15.00 in cash, for the photograph and description third in order of excellence;

Fourth prize, \$10.00 in cash, for the photograph and description fourth in degree of worthiness.

Conditions of Competition.

The conditions of the competition are as follows:

The photograph must be accompanied by descriptions of how the window displays were arranged and the materials used. The description is important and hence should be adequate. These photographs and descriptions may be sent by mail or express, charges prepaid, and must reach this office not later than February 15, 1921. Address all photographs and descriptions to American Artisan and Hardware Record Window Display Competition, 620 South Michigan Avenue, Chicago, Illinois.

Each photograph and description must be signed by a fictitious name or device and the same name or device must be put in a sealed envelope containing the real name and address of the contestant. This sealed envelope is to be enclosed with the photograph. Contestants are permitted to enter as many photographs of displays as they please.

A Competition Committee of three will be appointed. One of them will be an expert window dresser and one an experienced hardware man. This Committee will pass upon the merits of all photographs and descriptions received, without knowing the names or addresses of the senders, and will decide the winners of the Competition.

AMERICAN ARTISAN AND HARDWARE RECORD reserves the right to publish all photographs and descriptions submitted.

Gives Outline of New York Hardware Program.

The program of the New York State Retail Hardware Association convention, which is to be held in Rochester, New York, February 22, 23, 24, and 25, 1921, is being developed by a committee consisting of Vice-president Jay Brackett of Ilion, Martin Van Dussen of Rochester and the Secretary, John B. Foley. It is hoped to have the outline for the entire week in the hands of members early in February, so that it may be studied in advance.

Secretary Foley gives the following outline in his January 15th letter to the membership of the Association:

"At this time a few speakers and their topics may be mentioned—Tuesday, February 22nd, being opening day and also a holiday, the session will open at ten o'clock and it will be patriotic as well as practical in character.

"James H. Boucher, veteran hardware jobber and one of the most lovable characters in the trade, will speak briefly and Joseph Alling also of Rochester, who spent two years in camps and abroad in Y. M. C. A. work during the war and who is a powerful speaker, will address the meeting. Singing as usual will have an important place in this and in later meetings.

"Wednesday we will have two sessions at the same hours; the merchants will meet in one room and their employes will conduct a special session by themselves in another room.

"This 'clerks' day meeting will be presided over by Rivers Peterson, editor of the National Hardware Bulletin, a very practical hardware man, thoroughly human, with a long service in the trade as employe and employer.

"Your 'boys' will enjoy Mr. Peterson; they will in addition, discuss many things, probably their 'bosses' and they will hear two speakers, Messrs. Francis B. Steele of Batavia, and Joseph A. Famulare of Richfield Springs—perhaps others if time will permit.

"Mr. Peterson will represent the National Retail Hardware Association generally at the convention, speaking twice during the week.

"Others already promised on important topics are Archer Wall Douglas of Chamber of Commerce of the United States, George F. Williams, vice-president First National Bank of Herkimer, Seymour H. Sears of New York, and William H. Paddock of Wolcott, a well known member of the New York Association."

Incorporate Wire Works.

With a capital stock of \$50,000, the Rhode Island Wire Works, Providence, Rhode Island, has been incorporated by John H. Campbell, George H. Campbell, and Harold R. Curtis.

Washing Machine Company Gets Charter of Incorporation.

L. Maples, 311 Fifth Avenue, New York City, D. H. Lehman, and R. Lasker are the incorporators of the Maples Washing Machine Company. The capital stock is reported to be \$1,000,000.

Influential Firm of Florida Hardware Jobbers Sets Convincing Example of Institutional Advertising.

Tampa Hardware Company Takes Twenty Pages in Single Issue of Newspaper to Celebrate Its Twenty-first Anniversary.

Under the mistaken notion that the function of the jobber is purely that of distribution between manufacturer and retailer, the habit of refraining from advertising has become established with wholesalers in practically all lines of industry.

It is only recently that the matter has been viewed from a different angle. It is slowly becoming to be perceived that the wholesaler bears a relationship to the general public in maintaining the publicity of commodities which are marketed under a national trade-mark.

The jobber is in reality the salesman of the manufacturer and has a work to perform in presenting the

given line of products, nevertheless the wholesaler has a vital interest in both forms of publicity.

The prosperity of the jobber depends upon the good will created through advertising. Primarily, it is essential to the welfare of the wholesaler that he gain the good will of the dealer and enable the dealer to give satisfaction to his customers by prompt shipment of orders.

The wholesale house thrives best when it creates in the minds of its retail patrons the impression of an institution which is adequate and reliable in all its jobbing operations.

The ultimate consumer is no longer wholly separat-



The above advertisements, shown herewith in reduced size, give evidence of shrewd and friendly cooperation of the Manufacturers in the promotion of institutional publicity. All these advertisements appeared in connection with the Tampa Hardware Company's 20-page section of advertising in the leading daily paper of Tampa, Florida.

product of the manufacturer to the consumer through the retailer.

By reason of the fact that the jobber does not, as a rule, carry only a single line of a given commodity, he is in the position of representative of competing products. His problem, therefore, is to make competition cooperative rather than antagonistic and unfriendly.

While it is true that the general publicity of the manufacturer and the local publicity of the retailer are the main factors in acquainting customers with a ed from the jobber. More and more he is brought into contact with the wholesaler through various avenues of publicity.

The reputation of the wholesale house percolates downward, as it were, into the general mass of the people. That reputation is frequently used as a gauge by which to measure the trustworthiness and standards of quality of the retailer.

Therefore, both from the point of view of the jobber's relation with the retailer and from the angle of the general public, it is important that the jobber

The effectiveness of this unusual THE TAMPA DAILY TIMES advertisement is given practical recognition by leading manufacturers whose advertisements were "Watchman, What of the Night? published in connection with these twenty pages of institutional puband the Watchman Said---'The Morning Cometh!' Among the manufacturers whose advertisements appear in this twenty page special section of the Tampa Daily News are the Stanley Works, THE whole country is asking, "What of the Night?" New Britain, Connecticut; Conand rightly, for it has faced the storm, but—the clouds are passing, the sun begins to shine, and the watchman cries aloud to the farmer and the merchant, the manufacturer and the day laborer. "The Morning tinental Company, Detroit, Michigan; E. C. Atkins and Company, Indianapolis, Indiana; Hirshberg Paint Company, Baltimore, Mary-JAMES HILL once said, "The man who is a 'Bull' on America must win." Likewise the man or the business that pins its faith on Florida must succeed. Outweighing all other factors the employes of this institution are schooled first in land; and National Enameling and Stamping Company, Milwaukee, the ideal which is the cornerstone of this business---to serve Florida well by pro-Wisconsin, all of whose products moting the interests of our customers are handled by the Tampa Hard-LOYAL employes, men who have come up from the ranks, are the greatest asset the Tampa Hardware Company possesses. It is the willingness of our workers, their close application to their duties, and their vision that has determined our efficiency ware Company. Herewith are reproduced some of these pages together with two AND now that the unfailing signs of the coming of the day are seen in the East, we say to our customers. BUY HARDWARE NOW Replenish your stocks, buy wisely, of course, but buy in recognition of the fact that "The Morning Cometh," and business is fast awakening Be ready, fill your store's requirements remarkable whole page advertising editorials of the Tampa Hardware now, and do not be caught like the foolish Tampa Hardware Company's 21st Anniversary Tampa Hardwa PETER O'KNIGHT **Exclusively Wholesale** The Fair and Square Policy FOUNDED on a retail hardware business in 1900, with use advertising for the purpose of little capital but unbounded faith in Tampa and picturing his business as an insti-Florida, the Tampa Hardware Co., in a few months tution possessing the advantages after the venture was launched, entered into the wider field of WHOLESALE HARDWARE : : : of fair dealing and high standards of service. Each year the business grew, with the volume of sales, both at retail and wholesale, doubling and trebling, making necessary new locations and a greater personnel. Eventually the retail and the wholesale business, although one in ownership and That its policy of wholesale exclusively has been vindicated cannot be denied—the growth of the business, the only exclusively wholesale hardware house in Florida, with every That these truths are appreciated and put into practice is evidenced by the gradual increase of increasing momentum in the passeveral years is ample proof that the increasing momentum in the ps several years is ample proof that it good will of the retailer throughor the state has been won by the hous that refused to compete—in ar sense—with its own customers. advertisements in trade journals and newspapers by jobbing houses But, as the retail business developed until its trade was drawn not only from Tampa, but all parts of South Florida—as the branches in West Tampa and Ybor City loomed up as active competitors of other retail hardware stores, the realization that the time had come to take one path or the other—the wholesale or the retail—confronted the company which formerly never thought of ¶After all, action speaks louder than words—and the action of the Tampa Hardware Co., in 1914 will never be forgotten by the retail hardware trade of Florida. making any effort to establish themselves institutionally in the good will of the people. (Today, the Tampa Hardwa A notable and convincing examis anxious to serve all retail hard-ware dealers—to be able, through its published summaries of market conditions, its experience and the opinions formed by close surveys of the hardware field, to assist the ple in this connection is that of the Tampa Hardware Company, Tampa, Florida. In the January 8, 1921, issue of the Tampa Daily News, Tampa, Florida, a special section consisting Tampa Hardware Co.

W. C. THOMAS, Gm. Mp.

TAMPA, FLORIDA

of two parts of ten pages each is

used by the Tampa Hardware

Company to put itself before the dealers and customers of Florida

and adjacent trade territory.

Company.

One of these editorial pages bears the title: "Watchman, What of the Night?" This page is a splendid message of optimism to all the people.

The other page, bearing the headline: "Exclusively Wholesale," is institutional in its influence. It sums up in terse, persuasive, and convincing sentences the position of the Tampa Hardware Company in relation to the business of its trade territory. It creates the impression of sincerity, honesty and continuous fulfillment of all responsibilities.

In an explanatory letter to American Artisan and Hardware Record, W. C. Thomas, Treasurer and General Manager of The Tampa Hardware Company,

writes:



W. C. Thomas, General Manager and Treasurer of the Tampa Hardware Company.

"This 20-page section represents the final broadside in a statewide advertising campaign we have conducted to stimulate hardware buyers in Florida, to encourage the hardware retailer and to prepare him for the readjustment period. For three months prior to the publication of the 20-page section, we ran full page ads in the daily papers.

"The splendid results attained from this campaign have more than justified the expense. We gave consumers and retailers alike the real facts

of the hardware situation, as we saw it, and inspired the confidence which caused both to buy. Our business has never been better than during the past three months.

"For an exclusive wholesale concern to buy page ads in daily newspapers is, we admit, rather an innovation, but we, at least are convinced that it has been profitable in our case.

"Perhaps other hardware men may find in our plan something that will be helpful to them. That is the reason we are passing it on to you for any disposition you care to make of it."

Few more striking illustrations of the meaning and reward of service are to be had in the business history of America than in the wonderful growth from humble beginnings of the Tampa Hardware Company.

Its development in twenty years from the small retail store with \$15,000 capital and one employe to a great wholesale house with \$400,000 capital and almost one hundred employees is a romance of achievement.

As the story is told by The Tampa Daily News, the Tampa Hardware Company of today is the realization of a vision—of a boyhood dream which formulated in the fertile mind of W. C. Thomas, now treasurer and general manager of the firm, while he was a barefoot lad of 14, working in his father's hardware store at Valdosta, Georgia.

The boyhood dream, backed by the determination

to master every complexity of the hardware business, slowly but surely became a reality.

From the little retail store, in the building then owned by W. A. Morrison, but now the Dawson-Thornton Building, has developed the only exclusively wholesale hardware business in Florida, with a force of 12 traveling men covering the entire state.

When Mr. Thomas founded the Tampa Hardware Co. in 1900, with a meager capital of \$15,000, the working force consisted of two men—Mr. Thomas and a negro porter, John Hudson—a young negro who came with Mr. Thomas from Valdosta, and who is still in the Tampa Hardware Company's employ, after 20 years of faithful execution of his duty to Mr. Thomas and the company.

As the business of the firm grew by leaps and bounds the working force was enlarged, and a very large percentage of the present employes have been with the company year after year and have known no other employers since entering a business career.

Here lies one secret of the growth and success of the business—this policy of finding among its employes the men for positions higher up, to develop department heads and executives and to maintain a spirit of fellowship that is in keeping with its desire to serve its customers and the state.

Mr. Thomas and his associates in the business, in 1900, set out with the determination either to build up a creditable business or go broke in the attempt.

With "Service" as their guiding watch-word and policy, they reached out for a share of the trade of South Florida.

Satisfied customers brought more trade, and soon the firm was out-pacing Tampa and the surrounding territory in a steady and prosperous growth.

The firm continued to enlarge both its retail and wholesale business, and the number of its customers grew with every passing week. In 1914, it had one of the largest retail stores in the city, in the building now occupied by Woolworth's, which was doing more than \$200,000 a year in business.

But the company's policy of "Service" coupled with the belief that it could not, in fairness to its customers, the retail stores of Florida, continue to sell at retail, was responsible for its abandoning the retail business in 1914, and thus cutting off a good source of its returns on monies invested.

This sacrifice of a profitable retail business to a principle, at the time, made a considerable inroad on the profits of the company. But the progress of the business in the past six years has fully justified the directors of the firm in what then seemed a drastic action.

It is simply fairness, Mr. Thomas says, to sell at wholesale only, for to maintain a retail department is simply to compete with the company's customers; to sell a man goods and then sell against him.

The expansion of the business has made it possible for Mr. Thomas to carry out more fully his cherished ideals of serving the retail hardware stores of Florida in a competent and acceptable manner.

In the early days of the enterprise Mr. Thomas frequently found it necessary to sell goods before buying them—on many occasions personally soliciting orders,

waiting until they were safely in hand from the retailer, before ordering goods from the manufacturer.

But now the company is able to carry out its policy of service to a fuller degree, and it endeavors constantly to meet every demand of its trade and, whenever possible, to keep a little in advance of the field.

Courtesy, an essential in any business, has been one of the prime factors in the upbuilding of the firm to its present greatness.

Today the Tampa Hardware Company occupies a modern five-story warehouse, 105 by 105 feet, at Pierce and Cass Streets. Its yards, nearly half as large as the huge building, are adjoining.

The annual business of the firm now runs into millions. Instead of a small store, selling at wholesale only—its business being divided as follows: Light hardware, Columbia grafonolas and records, automobile accessories, horseshoe automobile casings and tubes, sporting goods and hotel supplies. Each of these departments has a complete stock and is steadily growing.

The present officers of the firm are: President, Peter O. Knight; treasurer and general manager, W. C. Thomas; assistant general manager, J. L. Lawrence. The officers of the organization as well as the firm as a whole, have always been active participants in public-spirited movements for the general good.

Roads Offer Lower Rates to Wisconsin Convention.

According to P. J. Jacobs, Secretary Wisconsin Retail Hardware Association, reduced rates over all railroads in Wisconsin have been secured for members, their families, and helpers, attending the Annual Convention in Milwaukee, February 2, 3 and 4.

"Provided 350 certificates or over are presented for indorsement of the railroad officials which will entitle the holders to half fare rates on the return ticket.

"Read carefully the following instructions and keep them for reference if necessary:

"Full fare tickets from destination to Milwaukee may be purchased on any date from January 29 to February 4. Return tickets when accompanied by certificate can be had at half fare on any date from February 3 to February 8.

"Be sure when purchasing tickets from your home agent to ask for a certificate (not a receipt). If he is unable to furnish a certificate take a receipt at the same time you buy your ticket. Tickets must read to Milwaukee and no other point.

"Have your certificate stamped the same date as your ticket. Sign your name in ink on the certificate or the receipt in presence of your agent.

"When arriving in Milwaukee turn in your certificate at the Secretary's office in the Auditorium. When 350 have been received they will be indorsed by the railroad officials, and by a representative of your State Association office.

"Call for your certificate so validated at the Secretary's office before leaving for home and present it together with half fare in payment for a full fare ticket to your home town.

"No refund of fare will be made for failure to secure certificate or to have same properly endorsed. "Tickets must amount to 67 cents or over in order to entitle you to the rate.

"You must return over the same route that you came over."

Washing Machine Manufacturers Hold Annual Meeting.

The annual meeting of the American Washing Machine Manufacturers' Association was held January 19th and 20th at Hotel Sherman, Chicago, with a very large attendance.

President H. L. Barker, of the 1900 Washer Company, Binghampton, New York, called the session to order shortly after 10 a. m. Wednesday and in his annual address called attention to the fact that, judging from his own business, both wholesalers and retailers were once more in a buying mood, as orders had begun to come in with fairly good regularity—not for large quantities, but from a goodly number of dealers and from practically every section of the country. He stated that he had no reason to believe that his Company was an exceptional case, and that he looked for a considerable impetus in sales from now on, as stocks were low in all parts of the United States.

Special commendation was made of the excellent work done by Secretary E. B. Seitz and the Assistant Secretary Miss Keown, under whose direction the educational campaign among consumers had been planned and executed. President Barker gave high praise to Mr. Seitz and Miss Keown for their very efficient work, from which results were already becoming evident, although this activity was started only eight months ago.

In closing, President Barker thanked all the members and especially the various committees for the hearty cooperation they had given him during his term of office and bespoke the same for his successor.

Secretary E. B. Seitz rendered a very interesting report of the activities of the executive office, from which it was evident that the Association has a Secretary who is not only not afraid of work but who fills his position in a most efficient manner. Mr. Seitz made mention of the educational campaign which is being conducted by Miss Keown in cooperation with various colleges and state agricultural departments, but left it for her to explain in detail how this work is carried out.

On motion by Howard W. Power, of the H. F. Brammer Manufacturing Company, Davenport, Iowa, it was voted to have the report of Secretary Seitz printed and mailed to all members.

Miss Keown, who is a very pleasing young woman, gave an outline of the work under her direction, telling how in fourteen states the Agricultural Extension Departments and Home Economics Departments of many colleges and normal schools had been induced to include recommendations for and actually had made hundreds of demonstrations of washing machines at meetings of housewives, thus interesting them actively in securing one of the labor-saving appliances. From nineteen other states requests had come from similar institutions for assistance along the same line.

The Association listened to Miss Keown's recital with much interest and it was the universal opinion that her work was such that great benefit would result from it.

In the afternoon, a moving picture demonstration was given of the manufacture of Armco ingot iron, followed by a discussion of the service bulletins which the Association is planning to publish in connection with its sales promotion work.

A banquet was enjoyed in the evening, at which the election of officers took place with the following result:

President—R. D. Hunt, of the Dexter Company, Fairfield, Iowa.

First Vice-president—Walter J. Conlon, of the Conlon Electric Washing Machine Company, Chicago.

Second Vice-president—Silas Altorfer, of Altorfer Brothers, Peoria, Illinois.

Third Vice-president—J. P. Moynihan, of the Blackstone Manufacturing Company, Jamesport, New York.

Secretary-E. B. Seitz, Chicago.

Treasurer—W. H. Voss, of the Voss Brothers Manufacturing Company, Davenport, Iowa.

Members of the Executive Committee are:

Howard W. Power, of the H. F. Brammer Manufacturing Company, Davenport, Iowa.

L. A. Dietz, of the Boss Washing Machine Company, Cincinnati, Ohio.

E. H. Maytag, of the Maytag Company, Newton, Iowa.

J. D. A. Johnson, of the Michigan Washing Machine Company, Muskegon, Michigan.

F. A. Bergman, of the One Minute Manufacturing Company, Newton, Iowa.

The underlying tone of the entire meeting was that of conservative optimism. No one looked for a resumption of boom conditions, but all reported that their sales departments were once more actually doing business, that the "slump period" was over, and that from now on there would be a general improvement in all sections, both in the matter of collections and in new sales.

Railroads Reduce Fares for Nebraska Convention.

Arrangements have been made by the Nebraska Retail Hardware Association with the railroads for reduced fares to Omaha, January 28 to February 3, inclusive, good to return February 4 to 8, 1921.

Hardware dealers who attend the convention of the Association in Omaha, February 1, 2, 3, and 4, whether members of the organization or not, may take advantage of the reduced rates.

The conditions governing the reduction, as announced by George H. Dietz, Secretary Nebraska Retail Hardware Association, are as follows:

"Pay full fare to Omaha. Your ticket agent has been advised of this convention and upon request will issue you a certificate stamped the same date as your ticket. If impossible to obtain a certificate ask for a receipt.

"Register at the secretary's desk immediately upon

arrival, where it will be validated for a return trip at one-half fare, providing 350 or more certificates have been registered.

"This applies to all who purchase tickets registered whether or not they are members of the Association."

Produces New Breast Drill With Three Jaw Chuck.

A new breast drill, with three jaw chuck made entirely of steel, has been placed on the market by the



Three Jaw Chuck of New Breast Drill.

Consolidated Tool Works, Incorporated, 261 Broadway, New York City.

It is made without springs, thus

doing away with a possible source of trouble.

All the gears have full-cut teeth, and the low speed gear is constructed of steel. The speed change is controlled by one push pin, thereby making the drill simple and positive in its action.



New Breast Drill No. 1935, Made by Consolidated Tool Works, Incorporated, New York City.

What is said to be an improvement upon existing types is the fact that the frame of this breast drill

is made in two pieces.

As a result of this feature, it can be taken apart quickly at the center, so that it can be carried easily and packed in small space in tool box or bag.

Another advantage claimed for this breast drill is that the breast plate can be adjusted to any rightangular position.

There are cases in which it is desirable to use a level in connection with a breast drill.

To meet such requirement, the Consolidated Tool Works, Incorporated, make the No. 1935L Breast Drill with Three Jaw Chuck, furnish with level, which otherwise is exactly the same as their No. 1935 Breast Drill.

Both drills are 18 inches long and have handles of native hard wood, stained and polished.

Irby Bennett Is to Be Officer of Western Cartridge Company.

Announcement is made by the Western Cartridge Company, East Alton, Illinois, that General Irby Bennett, of Memphis, Tennessee, prominent in the Old Guard Southern Salesmen's Association and for thirty-seven years connected with the Winchester Repeating Arms Company in various capacities, is now associated with the Company and that at the next annual meeting of the Board of Directors in February he will be made Vice-president of the Western Cartridge Company.

This will be interesting news to General Bennett's large circle of friends among the hardware jobbers, because it indicates the high value which is placed

upon his salesmanship, technical knowledge of the trade, and attractive personality.

Trade Opportunities in Foreign Lands.

The Bureau of Foreign and Domestic Commerce through its Special Agents, Consular Officers and Commercial Attachés, is receiving information of opportunities to sell hardware and kindred lines in several foreign countries. Names and locations will be supplied on request to the Bureau in Washington or its District Offices. Such requests should be made on separate sheets for each opportunity, stating the number as given herewith:

34324—An importing firm in India desires to be placed in touch with manufacturers and exporters for the purchase of hardware, cutlery, kitchen and household goods, etc. Refer-

34328—A commercial agent in Argentina desires to secure the representation of firms for the sale of general lines of hardware and automobile accessories. Quotations should be given f. a. s. New York or c. i. f. Buenos Aires.

34294.—A trading company in the Netherlands desires to secure an agency for the sale of motor cycles, bicycles, bicycle frames, and accessories. Quotations should be given c. i. f. Amsterdam or Rotterdam. Payment to be made upon receipt of goods. Reference.

Coming Conventions.

Missouri Retail Hardware Association, Planters Hotel, St. Louis, Missouri, January 25, 26 and 27, 1921. F. X. Becherer, Secretary, 5106 North Broadway, St. Louis, Missouri.

Mountain States Hardware and Implement Association, Brown Palace Hotel, Denver, Colorado, January 25, 26, 27, 1921. W. W. McAllister, Secretary-Treasurer, Boulder,

Colorado.
Indiana Retail Hardware Association, Athenaeum Hall, Indianapolis, Indiana, January 25, 26, 27 and 28, 1921. G. F. Sheely, Secretary, Argos, Indiana.
Oregon Retail Hardware and Implement Dealers' Association, Portland, Oregon, January 25, 26, 27 and 28, 1921. E. E. Lucas, Secretary, Hutton Building, Spokane, Washington.
Kentucky Hardware and Implement Dealers' Association, Louisville, Kentucky, January 25, 26, 27 and 28, 1921. J. M. Stone, Secretary, Sturgis, Kentucky.
American Society of Heating and Ventilating Engineers, Philadelphia, Pennsylvania, January 25, 26, 27 and 28, 1921. Casin W. Obert, Secretary, 29 West 39th Street, New York City.

Casin W. Obert, Secretary, 29 West 39th Street, New York City.

West Virginia Retail Hardware Dealers' Association, Huntington, West Virginia, February 1, 2, 3, 1921. James B. Carson, Secretary-Treasurer, Dayton, Ohio.

Nebraska Retail Hardware Association, Hotel Rome, Omaha, Nebraska, February 1, 2, 3 and 4, 1921. George H. Dietz, Secretary, Lincoln, Nebraska.

Indiana State Association of Sheet Metal Contractors, Hotel Dennison, Indianapolis, Indiana, February 2, 3 and 4, 1921. Ralph R. Reeder, Secretary, 314 East 16th Street, Indianapolis, Indiana.

Wisconsin Retail Hardware Association, Milwaukee,

Indianapolis, Indiana.

Wisconsin Retail Hardware Association, Milwaukee, Wisconsin, February 2, 3 and 4, 1921. P. J. Jacobs, Secretary, Stevens Point, Wisconsin.

Oklahoma Hardware and Implement Association, Oklahoma City, February 8, 9 and 10, 1921. W. B. Porch, Secretary-Treasurer, Oklahoma City, Oklahoma.

The Michigan Retail Hardware Association, Grand Rapids, Michigan, February 8, 9, 10 and 11, 1921. Arthur J. Scott, Secretary, Marine City, Michigan.

North Dakota Retail Hardware Association, Fargo, North Dakota, February 8, 9, 10 and 11, 1921. C. N. Barnes, Secretary, Grand Forks, North Dakota.

Pennsylvania and Atlantic Seaboard Hardware Association, Incorporated, Convention and Exhibition, Philadelphia

tion, Incorporated, Convention and Exhibition, Philadelphia Commercial Museum, Philadelphia, February 8, 9, 10, 11, 1921. Sharon E. Jones, Secretary, 1314 Fulton Building, Pitts-

Illinois Retail Hardware Association, Hotel Sherman, Chicago, Illinois, February 15, 16 and 17, 1921. Leon D. Nish, Secretary, Elgin, Illinois.

California Retail Hardware and Implement Association, San Francisco, California, February 15, 16 and 17, 1921. Le-Roy Smith, Secretary, 112 Market Street, San Francisco, California,

Minnesota Retail Hardware Association, St. Paul Auditorium, St. Paul, Minnesota, February 15, 16, 17, 18, 1921.

H. O. Roberts, Secretary, Metropolitan Life Building, Min-

neapolis, Minnesota. Ohio Hardware Ohio Hardware Association, Columbus, Ohio, February 15, 16, 17 and 18, 1921. Hotel Headquarters, Deshler Hotel. Exhibition in Memorial Hall. James B. Carson, Secretary, Dayton, Ohio.

New England Hardware Dealers' Association, Mechanics' Building, Boston, Massachusetts, February 21, 22 and 23, 1921. George A. Fiel, Secretary, 10 High Street, Boston, Massachusetts.

chusetts.

Virginia Retail Hardware Association, Petersburg, Virginia, February 22, 23 and 24, 1921. Thomas B. Howell, Acting Secretary, Richmond, Virginia.

Michigan Sheet Metal Contractors' Association, Hotel Durant, Flint, Michigan, February 22, 23 and 24, 1921. F. E. Ederle, Secretary, 1121 Franklin Street, S. E., Grand Rapids, Michigan

Ederle, Secretary, 1121 Franklin Street, S. E., Grand Rapids, Michigan.

Iowa Retail Hardware Association, Savery Hotel, Des Moines, Iowa, February 22, 23, 24 and 25, 1921. A. R. Sale, Secretary-Treasurer, Mason City, Iowa.

New York State Retail Hardware Association, Rochester, New York, February 22, 23, 24 and 25, 1921. John B. Foley, Secretary, 607 City Bank Building, Syracuse, New York.

York.

South Dakota Retail Hardware Association, Sioux Falls,
South Dakota, February 22, 23, 24, 25, 1921. H. O. Roberts,
Secretary, Metropolitan Life Building, Minneapolis, Min-

Secretary, Metropolitan Life Building, Minneapolis, Minnesota.

Southern Stove Manufacturers' Association, Hotel Seelbach, Louisville, Kentucky, February 14 and 15, 1921. W. H. Cloud, Secretary, 216 Glendora Avenue, Louisville, Kentucky. National Warm Air Heating and Ventilating Association, Cleveland, Ohio, April 19 and 20, 1921. Allen W. Williams, Secretary, Columbia Building, Columbus, Ohio.

Western Warm Air Furnace and Supply Association, Sioux City, Iowa, May, 1921. John M. Hussie, Secretary, Omaha, Nebraska.

Panhandle Hardware and Implement Association, Amarillo, Texas, May 8, 9 and 10, 1921. C. L. Thompson, Secretary-Treasurer, Dalhart, Texas.

Hardware Association of the Carolinas, Charlotte, North Carolina, May 10, 11, 12 and 13, 1921. T. W. Dixon, Secretary-Treasurer, Charlotte, North Carolina.

Southeastern Retail Hardware and Implement Association (composed of Alabama, Florida, Georgia and Tennessee), Atlanta, Georgia, May 17, 18, 19 and 20, 1921. Walter Harlan, Secretary, 701 Grand Theater Building, Atlanta, Georgia

Georgia.

Mississippi Retail Hardware and Implement Association,
Great Southern Hotel, Gulfport, Mississippi, June 14, 15, and
16, 1921. E. R. Gross, Secretary, Agricultural College, Mis-

Sheet Metal Contractors' Association of Ohio, Hotel Gibbons, Dayton, Ohio, July 19, 20, and 21, 1920. William J. Kaiser. Secretary, 123 East Chestnut Street, Columbus,

Retail Hardware Doings.

W. H. Hutchinson sold his interest in the hardware business of Hutchins and Atwater to Henry Pettlon at Manchester.

Kansas.

J. F. Havener has bought the hardware stock of Charles

Alspach at Phillipsburg.

W. H. Sells has purchased the interest of R. B. Hawk in the firm of Sells & Hawk at Effingham and the business will be conducted hereafter under the firm name of W. H. Sells Hardware and Implement Company.

Missouri.

Robert Salmon has bought the interest of his partners, R. L. Cowden and O. L. Moore, in the Windsor Hardware

Company at Windsor.
Charles Brinkmann has purchased the implement business of J. F. Lutemski at Owensville.

Nebraska.

Einar Nielsen has bought a half interest in M. M. Jacobsen's hardware business at Dannebrog.

C. L. Granlund is now the sole owner of the hardware firm of Granlund and Andersen at Holdrege.

Asa P. Cave, who has been in the hardware business many years, has decided to retire and is closing out his stock at Winetoon.

Oklahoma.

Ben Daugherty of Muskegee has purchased a half interest in the J. O. Price Hardware and Implement Company

Levett-Whicker Hardware Company at Magnum has been incorporated with a capital stock of \$10,000 by J. W. Levett, A. M. Levett, and G. S. Whicker.

Wisconsin.

Charles E. Savadil Hardware Company increased its capital stock from \$4,000 to \$25,000 at Milwaukee.

Advertising Help and Comment

Send Us Copies of Your Advertisements. Let Us Help You Get Bigger Results by Advice and Suggestions. The Service Is Free. Don't Hesitate to Take Advantage of It.

many words in an advertisement is one which is hard to overcome.

Naturally, when we are enthusiastic about a product, we try to

The temptation to use a great gee one pipe furnace, reproduced herewith from The Hartford Daily Courant, Hartford, Connecticut, the whole message is centered in the argument of economy.

street village where everyone knows everyone else.

You Can Have a Store in Every Block.

It would cost you a good deal of money to have a hardware store at every street crossing in your town.

You would have to carry duplicates of your stock in each one of

That would mean a big invest-

You can get practically the same effect by multiplying your store and its stock and service through constant advertising.

That is to say, you can tell the people in each block of your city that you have reliable goods, that you are glad to serve your customers in a friendly way because you like to be friendly and to distribute commodities which you know to be satisfactory.

It is advisable to keep a classified file of advertisements which contain suggestions of which you can make use.

In the accompanying illustration is shown a four-inches by two columns wide advertisement-reproduced one-half size-of Frank



tell all that we know of it in a single interview or speech or collection of

Now the fact is that most people get only one main idea out of any speech or book or advertise-

It is a waste of knowledge, therefore, to attempt to put all the details into one presentation of the

In the advertisement of the Ma-

conveyed in a few simple sentences.

Nothing is said about technical construction. Instead, fully onehalf of the space occupied by the advertisement is devoted to an illustration which pictures the way the furnace operates.

Dealers' names are inserted at the bottom of the copy. It would be better to give the street address of the dealers as well, for the reason that Hartford is not a one-

It is Hot, We Admit

But we also admit that it is going to turn cold and if we are any judges of past performances of the weather we would say that it will turn cooler or cold soon. Therefore, knowing those things, we want to call your attention to your counfort during the coming winter months. You will have, to be warm to be comfortable. We have the promise of an ample gas supply and we, as hardware dealers, have stocked heavily on gas stoves and rubber hose for your wants.

Frank P. Wood Hardware Co

P. Wood Hardware Company which appeared in the Daily Sun, Corsicana, Texas.

It is an example of good introductory copy-to be followed by other advertisements with illustrations, descriptive text, and specific price quotations.

Warm Air Heating and Ventilating

Better Installations. How to Sell More Warm Air Heaters. Reports of Progress in Warm Air Heater Research Work. Ventilating Factories, Garages, Theaters, and Houses.

Standard Furnace & Supply Company Gives Banquet.

The annual banquet of the Standard Furnace and Supply Company, Omaha, Nebraska, was held at the Athletic Club on Thursday, January 13th. Dealers within a radius of 50 miles from Omaha were in attendance. After the dinner an enjoyable vaudeville program was rendered.

Fred Nesbit, the President of the Company, made an address in which he thanked all for their attendance and particularly for the good will shown the Company for the past year. He assured them the same treatment and service in the future.

He then introduced George Harms of Peoria, Illinois, who in a brief address spoke on "The Future Outlook."

He stated that the future was mostly in the hands of each individual. For the pessimist, the past, present and future were always hard and dismal. For the optimist it is just the opposite. With him the birds are always singing sweetly and the sun is continually shining.

Mr. Harms said that the people of this, our great country, had by their ballot shown that a change was needed. The present quiet spell should be taken as a short vacation.

He predicted that with the change in administration, the coming of the blue-bird and the robin, and the spring weather, building activities would resume.

Prices on most building materials have already been reduced and others will soon follow. He stated that F. Meyer and Brother Company have shown their confidence in the future by buying large quantities of material, of which much is already in the warehouse. With the tin plate and sheet in stock and soon to arrive, they are prepared to do a larger business than even before.

E. I. Dodd of the New Foundry and Manufacturing Company, Sioux City, Iowa, who is also President of the Western Furnace and Supply Association, next addressed the banqueters.

He also expressed the opinion that the future of the furnace business was assured and that according to his observation the last half of 1921 would be a very busy one.

He stated that it was always a pleasure to be present where the Meyer interests got together, even without the stein on the table.

Harry Hussie in his usual witty manner told a number of stories which were thoroughly enjoyed by all. Harry is so well known and liked by the Sheet Metal and Furnace Dealers that the mentioning of his name puts everyone in an expectant mood. He always makes a hit.

With remarks from several dealers the meeting ad-

journed. All expressed their pleasure and wished the members of the Standard Furnace and Supply Company success for 1921.

Midland Furnace Club Displays Confidence in Future.

Confidence in the development of the furnace trade along lines of prosperity was the sentiment uppermost in the special meeting of the Midland Furnace Club which took place Friday, January 14th, in the Congress Hotel, Chicago, Illinois.

The prospects for the year were considered encouraging by all those in attendance. Allen W. Williams, the level-headed secretary of the Midland Furnace Club, is the last man in the world who would waste any time chasing rainbows. When he says unreservedly that he confidently looks for bigger business in the trade this year, it may be taken for granted that he has plenty of solid reasons for the statement.

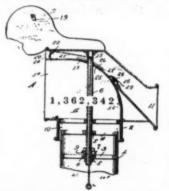
Estate Stove Company Issues New Furnace Catalogs.

Two new furnace catalogues have just been issued by the Estate Stove Company, Hamilton, Ohio. Both are profusely illustrated and contain ample descriptive text as well as rules for installation and general furnace data.

Catalogue No. 15 deals with "Estate" warm air heating systems; and Catalogue No. 16 is devoted to "Estate" single register warm air heating systems. Copies of these catalogues may be had upon application to the Estate Stove Company, Hamilton, Ohio.

Assigns United States Patent Rights for Ventilator.

Under number 1,362,342, Worthie W. Morey, Columbus, Ohio, assignor to F. O. Schoedinger, Columbus, Ohio, has obtained United States patent rights for a ventilator described as follows:



In a ventilator, a stationary stem, a support projecting above said stem and extending axially thereof, an open sided hood rotatable about said support, a movable damper positioned within said hood and serving to divide the latter into main and draft passageways, said mem-

ber being hinged at a position inwardly of the support and centrally apertured to receive the latter, the main passageway being situated to transmit air arising from said stem and to discharge the same through the open side of the hood, said draft passageway being disposed above said main passageway and open at both ends to effect a forced circulation of air through said main passageway, and a closure member carried by said damper and position around said support, said closure member operating to close the support receiving aperture in said damper irrespective of the operative positions of the latter within said hood and to thereby render said passageways out of communication with each other.

Answers Koerner's Smoke Pipe Problem.

To American Artisan and Hardware Record:

We have had an opportunity to look over the sketch sent in by Ig. Koerner and Son, 124 West Main Street, DuQuoin, Illinois.

As near as we are able to determine the sketch, the smoke pipe is extended to the outside wall of the building and then diagonally up across the wall 35 feet and turned into the chimney.

This fellow certainly has some problem and it is very evident that it is not convenient to extend the pipe to the flue in the room.

He asks if it would be practical to carry the pipe through the outside wall (assumed) and turn it up at that point, extending same to a lesser height than the flue and putting on some kind of hood.

We believe that he would have better results by so doing, particularly if he would put a whirl top hood of some make on the pipe, but in any event, we believe that he will have more or less trouble with this arrangement continually.

Our advice would be that this party do his utmost to carry the pipe up on the inside of the building and we trust that with the above information you will be able to assist him

Yours very truly,

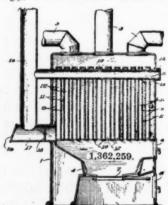
R. W. MENK,

Furnace Department, The Excelsior Steel Furnace Company.

Chicago, Illinois, January 15, 1921.

Secures Patent for a Furnace.

William H. Nehls, Portage, Wisconsin, has procured United States patent rights, under number 1,362,-259, for a furnace described in the following:



In a hot air furnace, the combination, of a casing, a fire box within said casing, a plurality of vertical and horizontal plates within said casing and dividing the space above said fire box into a plurality of vertical compartments, the alternate of said compartments having communication

with said fire box, a pipe extending horizontally through said casing near the upper end of said compartments, said pipe provided with a plurality of openings each communicating with one of said alternate compartments, and a stack having communication with one end of said horizontal pipe.

Engineer Makes Plea for Safe Chimneys.

A saving of at least \$75,000,000 out of the nation's annual fire loss of \$300,000,000 could be realized by the elimination of defective chimneys and unprotected vertical openings, according to Ira H. Woolson, consulting engineer of the committee on construction of buildings of the National Board of Fire Underwrites. Mr. Woolson said:

"There are 20,000 fires annually in the United States due directly to defective chimneys, and the loss from this single, easily corrected cause amounts to between \$15,000,000 and \$20,000,000.

"Unprotected vertical openings are the greatest cause contributing to the loss of life and property."

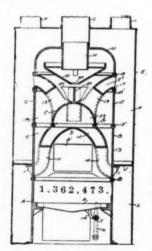
"A very large percentage—perhaps 90 per cent—of the life loss from fire in buildings results from the rapid distribution of smoke and fire through unprotected vertical openings, such as stairways, elevator shafts and dumbwaiters.

"The indications are that for vertical openings the reason for this stupidity is about 40-40 ignorance and economy.

"The remaining 20 per cent may be accredited to convenience—that is to say, a desire for open stairways or elevator shafts or other shafts for easy communication."

Gets United States Patent Rights for a Furnace.

Under number 1,362,473, United States patent rights have been granted to Leonard Joseph Clossey, Detroit, Michigan, for a furnace described herewith:



A furnace comprising a plurality of superimposed sections, and a casing surrounding the sections and forming herewith an air space divided into upper and lower compartments, the lowest sections having a fire box and ash pit, the next upper section having a plurality of air passages extending from the lower air compartment inwardly toward the center of the section, and forming a dome for the combustion cham-

ber, and smoke passages extending between the air passages, the second upper section having a central air chamber into which the said air passages open, a plurality of outwardly extending air passages leading from the said chamber to the upper air compartment, and smoke passages extending between the air passages, the third upper section being in the form of a hood and having a smoke outlet.

Practical Helps for Tinsmiths

No Two Jobs Are Exactly Alike. Therefore, the Sheet Metal Worker Has to Meet Each Difficulty as It Comes. Send Your Problems to Us. Let Our Experts Help You.

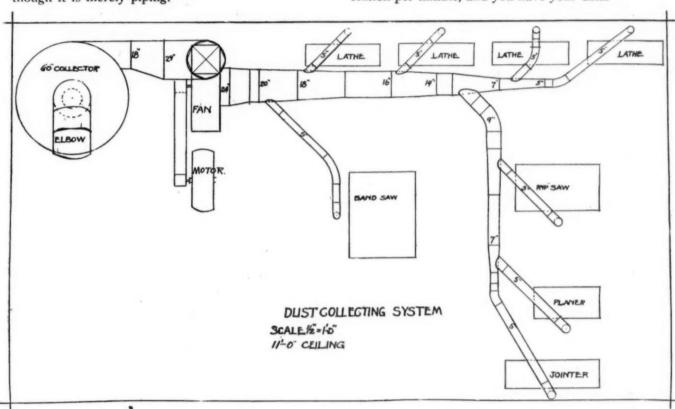
DUST COLLECTING SYSTEM.

By O. W. Kothe, Principal St. Louis Technical Institute and Instructor in the David Rankin, Jr., School of Mechanical Trades, St. Louis, Missouri. Written especially for American Artisan and Hardware Record.

Blow pipe jobs are becoming more numerous every year. Each factory requires a design of system all its own. This requires considerable originality, although it is merely piping. and number of blades are figured. This is not an easy problem for the layman mechanic.

So the best way to know the volume and velocity is to find the number of revolutions the fan makes per minute.

Then take the manufacturer's catalogue that made this fan, and look up tables. Find the number of fau, or diameter of wheel, etc., and check table with revolution per minute, and you have your data.



Dust Collecting System.

The man who must install these systems, must be an able workman, who understands design as well as

Then on all these jobs there are always numerous patterns to lay out that are of interest.

In this case we have fan run by a motor. The fan has a 24" opening, and is of ample size for the machines. The larger fan is no doubt selected to enable enlarging the system, by setting in other machines.

It is always better to have a fan larger than required, as a small fan must be crowded and this is not good practice.

A larger fan is geared down, thus running smoother with less speed and handles the work more positively.

To determine the volume and velocity of air which a fan exhausts, is done by means of a meter to measure the number of revolutions of fan per minute. Then the diameter of fan wheel, and width and depth A few tests this way will soon acquaint the workman with speeds, volume, and velocity.

The designing of the pipes is more of a matter of making the pipes of a size to carry the substance. Too large a pipe is not good as too great a waste in power is produced.

Most machines according to size are piped with 4 inch to 7 inch pipes. In this case we have 5 inch pipes. Each branch pipe causes an enlargement of the main suction line.

In this way the main suction line is made large enough to accommodate the full area of the branch pipes. Just where and how these branch pipes must run into the main line is governed by the settings of the machines.

But the branch pipes should not enter the main at less than a 45 degree angle. All pipes should be rivered every 2½ to 3 inches apart and the seams skimmed with solder.

14 200

...DopeSheet.

Written especially for American Artisan and Hardware Record, by J. C. Greenberg, Peoria, Illinois. (Copyright 1921, by J. C. Greenberg.)

When I entered Doc's office the other day, Edith, that's his wife you know, met me with a smile that made me think of home.

Doggone it boys, she can smile—believe me she can! No! Nothin' doin' on the vamp stuff, that's merely her way. She does everything with a smile, and when she does smile, she just lights up like a real live beautiful Santy Claus sister.

Let's see—what was I goin' to tell you? Oh yes,—Edith met me with a smile and pushed a bell. This was the high sign for Jim Stewart the foreman and buyer. Some class what?

When Jim came in, we exchanged the big hello, and he told me that he had an order for me, but I'd have to come over that evening at eight bells to get it.

"What's the idea," I asked him. He said he was in a hurry and couldn't explain,—but I was to come to the office for the order, and anyhow Doc wanted to see me, too.

At eight o'clock I was on deck, because I'm some hound for orders and like 'em any old time.

Well, in I walked, and in the office was Doc and Edith, (Gee she's some cupie) and Jim Stewart kind of waitin' for something I guess.

Well, I was the something. Doc was all tickled to see me, and I was glad to see him, but I could not just see the reason for the big laugh.

Anyhow, as soon as the giggles were over, Doc says to me:

"Come on back I want to show you a sight for sore eyes."

You know how it is boys, the good loyal U. S. A. is gone dry in places, and a sight for sore eyes is a good hint for a guy to break the law just a little.

But I never was so badly disappointed in all my life because he only made my mouth water with expectation—that's all.

Here's what I saw. Seated on chairs rented from Heintz the undertaker, was nearly every tinner in town. No, not the bosses, the workmen. There was twenty-six of 'em all told. In front of them was a large blackboard made up of black iron. In front of the blackboard was a table with some blue prints on it, and a

whole box of chalk—the kind they use in school.

The men all said hello, because I know nearly all of 'em, and after a little kidding, I was given a chair, and told to keep still.

Doc then steps over to the table, picks up a piece of chalk, and says:

"Boys, let's go." In a moment all was as quiet as a church, and Doc began to lay down the law of "common sense" to 'em about a problem that I didn't understand, because I am not a tinner.

Believe me, I wasn't the only one who didn't understand it either, nearly all of 'em didn't understand it till Doc made it as simple as near beer. Then they all saw it, and knew it. Here's the stunt as Doc explained it to me after "school."

"You know," he said, "I've set out to have the largest and finest shop in this burg, and I'm going to have it too. I have realized long ago, that education is the thing all men need. I know what it has made of me, and I want to spread the good dope. "I started with my men in this school idea, and before I knew it, some of the outsiders wanted a job in my shop, and get the school dope for nothing. Well, I couldn't hire 'em all, because I have not the work—not yet. Well, after I turned 'em down, Edith springs this one on me:

"She says I'm a fool for turning these good men away. They were willing to learn, and I should be glad to teach 'em. I couldn't see her at all, because I was not a free night school, and besides what do I want to teach another boss's man for? She just smiled, and said to me:

"'You're a fool in a lot of things.'

"I guess she was right at that.

"'Suppose you get busy enough to hire more men, where are you going to get them? Can't you see that if you invite all the tinners in town to attend the school you will be training the very men you will need sometime, and when you do need 'em, they will be wise and able, and competent tinners. It don't take any longer to teach a lot of men than it takes to teach only four of 'em'."

To Sheet Metal Contractors and Owners of Tin Shops:

Cut this page out and paste it on the bulletin board in your shop. This is the right dope for everyone concerned. It's just as good for you as it is for your mechanics. The sheet metal trade must, of course, support everyone who is dependent upon it. Profits are contingent upon not only efficient business methods but also upon intelligent craftsmanship. Knowledge and skill do not come merely from inspiration. They must be gained by practice and study. That is the reason why Mr. Greenberg places so much emphasis upon the value of text books and why he advises sheet metal workers to get a good set of books on sheet metal work

Sales Force of the Milwaukee Corrugating Company Meets.

Characterized by fine fellowship and enthusiasm, the annual convention of the Milwaukee Corrugating Company's sales force, held in Milwaukee, Wisconsin, January 3 to 7, 1921, was an unqualified success.

Daily meetings were held in the convention hall, when the whole "Milcor" line was discussed, item by item, and possible improvements suggested and discussed.

Wednesday evening, January 5, a banquet was held at the Milwaukee Athletic Club. Addresses were made by President Kuehn and Secretary Luedke and several of the salesmen and department heads, including



The above picture shows, reading from left to right: P. D. Shelmire, J. H. Schmidt, E. H. Jones, H. P. Schafer, K. I. Pottenger, E. L. McVicker, W. B. Raymond, P. G. Meyer, C. W. Kuhl, J. G. Holch, Robert Schmeider, Edson Perry, T. J. Evans, C. Willman, P. E. Sauerwein, H. H. Seifert, C. C. Banholzer, Wood Berlin, W. W. Cornelius, C. F. Nason, A. C. Scheder, E. J. Ryan, D. L. Hood, Louis Kuehn, President, F. D. Naylor, A. J. Luedke, Secretary, C. L. Atwood, Advertising Manager, William J. Colwell, J. H. Riddle, A. H. Schmelzer.

Messrs. Christman, Seifert, Pottenger and Sauerwein. C. L. Atwood, advertising manager, read a paper entitled "Adverse and Perverse Verse," mentioning practically everyone present in humorous verse.

J. H. Christman acted as toastmaster and kept things moving in a happy but business-like manner.

Addresses were also made by invited guests, including Messrs. Ben and Fred Pritzlaff and Fred Luedke of the Pritzlaff Hardware Company and Manager Jack of the Milwaukee Rolling Mill Company.

Messrs. Howell and Stewart of the Rolling Mill Company were also present.

The Reverend Dorward of Milwaukee gave the principal address of the evening.

Detroit Sheet Metal Men Hold Yearly Meeting.

The annual meeting of the Detroit Sheet Metal Contractors' Association was held January 10th in the Fort Shelby Hotel, Detroit, Michigan.

Following an honest-to-goodness banquet, which was thoroughly enjoyed by nearly one hundred persons, H. E. Doherty, Sales Manager Detroit Safety Furnace Pipe Company and President Traveling Salesmen's Auxiliary of the Michigan Sheet Metal Contractors' Association, was introduced as toast-

AND THE COURSE OF STREET AND THE PROPERTY OF THE PARTY OF

master by Charles Mumford, President of the Detroit

With appropriate references, he introduced Frank T. Daly, President Michigan Sheet Metal Contractors' Association, who spoke on the great need for close cooperation of sheet metal contractors during this period of readjustment so as to be qualified better to meet the fast changing conditions.

President Daly was followed by W. J. Kennedy, President Associated Building Employers, who gave an extended and interesting talk on why the sheet metal men should be properly organized and why each dealer should feel it his duty to promote the organiza-

Frank E. Ederle, Secretary Michigan Sheet Metal Contractors' Association, reviewed the activities of the State association during the past year and made a complete announcement of the program and entertainment features for the Flint Convention. He urged all members to attend the convention and assist in the general exchange of ideas.

J. E. Sweeney, Secretary Associated Building Employers, gave a thorough explanation of the workings and accomplishments of the American Plan of Em-

Between each of the speeches a vaudeville act was presented to give variety to the occasion and to make the affair one of entertainment as well as of educa-

Jack Clark of the Clark Hardware Company and Charles Mumford of Auto City Sheet Metal Works, had charge of the entertainment which was a distinct credit to them.

By unanimous vote Charles Mumford and Frank Robert were re-elected President and Secretary, respectively, of the Detroit Local for the ensuing term.

Here Is Final Draft of Indiana Sheet Metal Program.

The final draft of the program for the second annual convention of the Sheet Metal Contractors' Association of Indiana is herewith published.

The sessions are to be held February 2, 3, and 4, 1921, in Hotel Dennison, Indianapolis, Indiana.

February 2nd.

8:00 a. m., Wednesday

Session Board of Directors.

Opening of Exhibits. Registration and Distribution of Badges to members and visitors.

10:00 a. m.

Opening Session.

Convention called to order by Joseph C. Gardner, President State Association.

Address of Welcome by Colonel J. B. Reynolds, Indianapolis Chamber of Commerce.

Response by Joseph C. Gardner.

Appointment of Special Committees.

2:00 p. m.—

"Why an Auxiliary," by E. W. Norman.

(1) Report of State Officers.

(2) Report of Local Associations.

Address: "Sheet Zinc—Its Uses," by C. H. Stewart.

Question Box. A. George Pedersen of American ARTISA

A general discussion will follow each of these talks.

8:00 p. m.—
Auxiliary Night. In exhibit room,
Moving pictures and Lecture on
sheet steel, by J. W. Jenkins. Lecture on the manufacture of

February 3rd.

9:00 a. m., Thursday-

Address: "Fire Prevention Relative to Sheet Metal Work," by H. H. Friedley, State Fire Marshall.
Address: "Trade and Other Developments," by A. P. Lamneck, President National Association.
Address: "Cost System, by E. B. Langenberg.
Bring your printed forms with you for comparison.

2:00 p. m.-

Furnace Session.

lress: "Actual Experiments in Warm Air Heating," by Prof. A. C. Willard, University of Illinois. Address:

General discussion of furnace problems and laws and ordinances regulating the installation of warm air furnaces.

Address: "Vocational Training Through the Public Schools," by Russell C. Lowell, Director Vocational Education, Indianapolis Public Schools.

Question Box. A. George Pedersen of American

ARTISAN.

2:00 p. m.— Ladies' Theatre Party.

7:00 p. m.-

Banquet and Entertainment, Rainbow Room, Hotel Severin, for members, Auxiliary, Sheet Metal Con-Hotel tractors and Ladies.

February 4th.

9:00 a. m., Friday-

Report of Committees.

Address: "Overhead Expense," with blackboard demonstration by Messrs. Seabrook and Luckhardt of the National Association.

Entire morning to be devoted to this subject.

Question Box. A George Pedersen, American Artisan.

2:00 p, m.-

Address: "Investments versus Expenses," by Edwin A. Scott.

Election of officers.

Selection of next convention city.

Adjournment.

The ladies will be entertained during the business session by a committee in charge of Mrs. Ralph R. Reeder.

Arrange Details for Big Michigan Banquet.

Much guessing and speculation is going on in the sheet metal trade of Michigan concerning the nature



H. E. Doherty, President Salesmen's Auxiliary of Michigan Sheet Metal Contractors.

of the entertainment which the Salesmen's Auxiliary is preparing for the banquet to be given to the members of the Michigan Sheet Metal Contractors' Association February 23rd at the Hotel Durant in Flint, Michigan.

H. E. Doherty, President of the Salesmen's Auxiliary, and N. L. "Armco" Pierson, Ir., of the American Rolling Mill Company, spent Thursday, January 13th, in Flint arranging for the banquet and entertainment.

J. J. Aubry and Mr. Harlan of the Flint Furnace

Company with William Switzer of the Edwin Sterner Company took the day off and helped the visitors plan the details for a most interesting evening.

While Messrs. Doherty and Pierson would not give any information about the vaudeville which will follow the banquet at the Hotel Durant, all indications are that what has gone before in the way of amusement at former conventions has been merely a practice bout for the big event yet to come.

Will Organize Sheet Metal Men of Maryland.

A convention to organize a State Association of sheet metal contractors in Maryland will be held Saturday, February 12th, at the Builders' Exchange, 15 East Fayette Street, Baltimore, Maryland.

The movement to organize a State Association in Maryland has the unanimous endorsement of the Baltimore and Cumberland locals. A number of firms throughout the state have signified their willingness to join the State Association when formed. All sheet metal contractors in Maryland are cordially invited to be present and assist in organizing the State Associa-

The convention will be under the auspices of the National Association and national officers will be present and assist in organizing.

Notes and Queries.

Steel Wire for Piano Springs.

From W. F. Kasbohm, Van Wert, Ohio:

Please advise who makes steel wire for piano springs.

Ans.—The Schaff Piano Spring Company, 2011 Clybourn Avenue, Chicago, Illinois.

Portable Japanning Ovens.

From W. F. Kasbohm, Van Wert, Ohio:

Can you tell us who manufactures portable japanning ovens?

Ans.-G. S. Blodgett Company, Burlington, Vermont; Griswold Manufacturing Company, Erie, Pennsylvania; and Littleford Brothers, 444 East Pearl Street, Cincinnati, Ohio.

Radiator Shields.

From Sam S. Pearson's Sons, Ottawa, Illinois:

Will you kindly advise us who makes radiator shields for hot water or steam radiators?

Ans.-W. H. Johnson and Son Company, 330 East St. Joseph, Indianapolis, Indiana; and Rollyn Hawkins, Indianapolis, Indiana.

"Speco."

From Duluth Plating and Welding Company, West Duluth,

Will you please advise us who manufactures "Speco," advertised in AMERICAN ARTISAN AND HARDWARE RECORD?

Ans.-Special Chemicals Company, Highland Park, Illinois.

Gem Fire Pot.

From J. T. Hey, Tribune, Kansas.

Please tell me who makes the Gem fire pot.

Ans.—Burgess Soldering Furnace Company, Columbus, Ohio.

Air Compressor.

From Arthur B. Creacy, 209 Court Street, Pekin, Illinois. I would like to know who makes a small air compressor that can be pulled with one-half horse motors

Ans.—Joseph T. Ryerson and Son, 16th and Rockwell Streets, Chicago, Illinois.

Address of Illinois University.

From R. W. Boutwell, Carmi, Illinois.

Can you give me the address of the Illinois University of which A. C. Willard is Professor of Heating and Ventilating.

Ans.—University of Illinois, Urbana, Illinois.

Illustrations of New Patents

Watch This Page. Keep Yourself Informed Concerning Improved Devices Which May Save Labor in Your Shop or Add Another Source of Income to Your Retail Store.

1,363,227. Electric Stove. Fred C. Boyd, New Haven, and Albert J. Barnes, West Haven, Conn., assignors to The Faraday Company, New Haven, Conn., a Corporation. Filed Aug. 2, 1920.

1,363,274. Self-Adjusting Wrench. James Webb Saffold, Cleveland, Ohio, assignor, by mesne assignments, to Victor Manufacturing Company, Dayton, Ohio. Filed Nov. 30, 1917.

1,363,275. Washing-Machine. William H. Sargent, St. Louis, Mo. Filed Feb. 13, 1920.

1,363,316. Cap-Wrench. John Dudek, Campbell, Nebr. Filed July 12, 1919.

1,363,343. Wrench. Harry G. Norwood, Balti-more, Md., assignor to Maurice Strasburger and William V. Strasburger, Baltimore, Md. Filed Mar. 15,

1,363,383. Heat-Conductor. Hiram S. Ash and Alonzo J. Bridges, Bedford, Iowa. Filed Mar. 4,

1,363,429. Lamp-Burner. Michael Oros, Seattle, Wash. Filed May 11, 1920.
1,363,486. Lock. Elmer B. Stone, New Britain,

Conn., assignor to The American Hardware Corporation, New Britain, Conn., a Corporation of Connecticut. Filed Jan. 26, 1920.

1,363,493. Washing-Machine. Paole Schenectady, N. Y. Filed Sept. 10, 1919. Paolo Chillemi.

1,363,582. Permutation-Padlock. Jacob H. Fryer, Syracuse, N. Y. Filed Jan. 6, 1919.
1,363,592. Clothespin. Albert G. Hermanson,

1,363,600. Scissors Attachment. Peter Johnson, Minneapolis, Minn. Filed May 25, 1920.

1,363,605. Washboiler. George Kushner, Avella, Pa. Filed Sept. 25, 1920.

1,363,680. Apparatus for Removing the Pits From Cherries and Other Fruits. Milton Douglas Skinner, Port Credit, Ontario, Canada. Filed Sept. 27, 1919.

1,363,740. Wrench. Albert Lechnyr, Minneapolis, Minn. Filed Mar. 6, 1920.

1,363,765. Rule-Holder. Arthur Emerson, Yale, Mich. Filed May 8, 1920.

1,363,779. Fishing-Tool. Cedric E. Griffith, Los

Angeles, Calif. Filed Jan. 20, 1920. 1,363,817. Fishline-Reel. William Schmid, Kala-

mazoo, Mich. Filed Sept. 5, 1919.

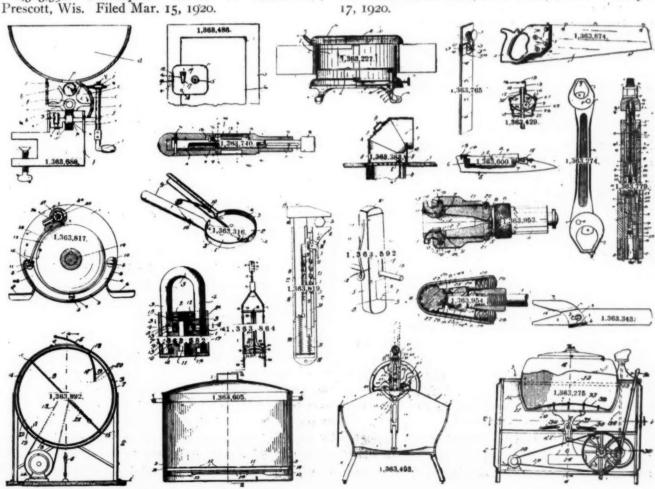
1,363,819. Adjusting Mechanism for Wrenches and the Like. Charles H. Simerson, Union Hill, N. J., assignor to said Simerson and Frederick H. Goldhardt,

Union Hill, N. J. Filed Jan. 17, 1920. 1,363,864. Combinational Roof Ladder Bracket. Hary Grush, Johnstown, Pa. Filed Sept. 15, 1919.

1,363,874. Combination-Tool. Stephen P. Holish, Chicago, Ill. Filed Apr. 5, 1920.
1,363,892. Washing-Machine. Roland A. McDonald, St. Joseph, Mo. Filed May 29, 1920.

1,363,953. Bit-Chuck. Addison B. Carll, New York, N. Y. Filed Jan. 17, 1920.

1,363,954. Ratchet Mechanism for Braces, Drills, etc. Addison B. Carll, New York, N. Y. Filed Jan. 17, 1920.



Weekly Report of the Markets

General Conditions in the Steel Industry. Review of Prices and Tendencies in Sheet Metals, Pig Iron, etc.

CONSUMERS OF STEEL INSIST ON LOWER PRICES.

Mainly because they are waiting for further reductions in prices, consumers of steel are staying out of the market.

Therefore, the booking of new business continues at low ebb throughout the country.

It is the general opinion that the independents will have to reduce prices below those of the leading interest in order to attract business.

The few soft spots in the finished steel market that have shown up during the past few weeks have hardly been added to, and most certainly have not become general.

The products obtainable at concessions from the established price schedule are plates, sheets, bars, hoops, bands, and rivets.

The prices on these are shaded only slightly and are not stimulating orders. Makers are reluctantly admitting, and consumers vigorously emphasizing that the present period of readjustment is not over.

Consumers are frankly fearful of present prices, and demand further price reductions, and the independents will in all probability accede to their demands.

Prices still are far and above those ruling prior to the war, but so are wages, and freight rates.

The leading interest has orders sufficient to maintain capacity production for more than half a year to come, which it must protect by maintaining the present price schedule, and consumers will be unable to hold off for that long is an argument in favor of the present price level ruling for the present.

Steel.

English, Belgian, French and German steel mills are becoming an increasing factor in the world's iron and steel trade and a serious menace to our own export trade.

During the past year France has increased her exports of iron and steel products eight times and Belgium three times. As reported the past week German mills and equipment companies took orders for 88 locomotives, 600 cars, 25,000 tons of steel rails and 5,000 tons of beams from the government of the Dutch Netherlands for use in Java after our mills had bid on the order.

The German bid on one type of locomotive was \$25,000, as against a bid of \$63,000 by American makers.

Belgian iron, the equivalent of our No. 2 foundry iron, is being offered at \$37, c. i. f. Havana, Cuba, and a cargo was recently offered in America for less than \$31, c. i. f. Atlantic seaboard.

American exporters are finding it increasingly profitable to fill foreign orders from European mills and sales of German and Belgian steel bars for export to Japan and the Dutch East Indies have been accomplished by American export houses, while others are anxious to make foreign connections with the same purpose in mind.

English mills are offering tin plate at a price equivalent to \$5.75, c. i. f. English ports, while German mills are underbidding American mills in nails, wire, sheets, plates and bars.

German car shops have also booked an order for several light locomotives at prices approximately 35 per cent under our prices for Japan.

However, as the iron and steel export trade of the United States does not exceed 15 per cent of the total, too much emphasis can not be given to this phase.

Copper.

The evidences of curtailment displayed by the December production reports and the refusal of the big producers to meet some of the consumers' low bids has served to convince a portion of the trade that no object can be gained in withholding their orders.

As credit conditions become easier and the business outlook becomes clearer, domestic consumers will go into the market for increasing amounts of copper, a fairly large movement being anticipated in February or March.

Already there have been fair sales of copper to wire drawers and the copper producers' association is understood to have sold about 15,000,000 pounds of copper for export during the past week and at prices comparing with the domestic market.

The main hope of a fairly speedy exhaustion of the present large supplies of refined copper is in the resumption of big construction projects in this country and Central Europe.

Ambitious plans for the development of water power and general electrification are known to have been made by France, Germany, Italy, Switzerland and the Scandinavian countries. If these plans are ever to materialize enormous amounts of copper will be required and this metal must be purchased in the United States.

Right now, in fact, the demand for copper from abroad is limited only by the inability of foreign industries to secure credits. Seemingly, as the financial situation in the country permits a way will be found to accommodate foreign customers for copper.

Tin.

In commenting on the tin situation, one of the largest consumers declares that the advance in exchange has done a great deal to shut off business that might have been done this month because larger manufacturers seem to feel that this advance is not justified by any improvement in approaching conditions, and that Sterling must again recede, when cotton buying, which has long been delayed, begins.

In other words, the present price of tin in Sterling might have induced some buying which has been shut off by the advance in exchange.

"While we are great believers in Straits tin for solder purposes," he says, "we find our fellow manufacturers have almost universally gotten away from the use of Straits due to the saving they are making on the best grades of American refined tin and this tendency to use these tins is growing in other lines than those of the alloyers."

A reduction of 33/4 cents per pound has occurred both for pig tin and bar tin in the Chicago market during the week.

Lead.

In the Chicago market, zinc in slabs has been rein prices. American pig lead has declined from \$5.35 per hundred pounds to \$5.30 and bar lead from \$6.10

Solder.

No additional change has taken place in Chicago prices for solder, quotations now in effect are as follows: Warranted, 50-50, per hundred pounds, \$25.00; Commercial, 45-55, per hundred pounds, \$23.00; and Plumbers', per hundred pounds, \$21.00.

Zinc.

An emergency protective tariff has been sought in Washington during the past week and there is a good chance of same going through.

If a tariff should be allowed the price would advance and so there is considerable interest evinced throughout the trade.

Prices at the close of the week were slightly lower than at the beginning, New York being quoted at 5.85 as against 5.90 and St. Louis deliveries at 5.50 as against 5.55 cents a pound on Monday of last week.

In the Chicago market, zinc in slabs has ben reduced from \$6.10 per hundred pounds to \$6.00.

Sheets.

A decline of 25 cents per hundred pounds has occurred in the Chicago market for one pass cold rolled black and galvanized sheets.

Open market demand for sheets continues to be extremely limited, but new requirements are arising in moderate volume against old contracts.

There is a little contract tonnage on books except in the case of the leading interest, and this is chiefly in contracts that were made for the last half year but were not completed.

Some releases have lately been received against suspended tonnage. The leading interest has received some orders from consumers who were customers in only a small way last year and the second half of 1919, but had previously been fairly large customers.

While some contracts are being made the chief business is in definite orders. Consumers are not greatly disposed to make engagements unless they want material shipped, and in that case they give definite orders instead of making contracts.

The mills agree fully with such a policy, having no particular desire to enter into contracts with buyers who are not prepared to specify at this time.

Tin Plate.

There is a slight increase in the tendency of tin plate consumers to enter into engagements. The improvement in the situation in the week is not great but it is regarded as sufficient to mark the pace as being forward rather than backward in the matter of returning confidence in the future of tin plate.

There is very little contract business, and neither the leading interest nor the independents are looking particularly for contract business.

They are not interested in contracts, but rather in specific orders. In the case of the independents there is not merely new business to look for but also releases from some of the suspension instructions received late in the old year, and the one class of business looks as good to the mill as the other, and the mill is dealing with regular customers and its business depends simply on the customer's consumption prospects.

As to the leading interest, it seems to be a matter of indifference whether the customer takes out a contract or simply gives a definite order, and some business of consequence, in the form of definite orders, is being booked.

The old contracts, written originally for the second half of last year, are now well specified, the specification being equal to operations for several weeks to come.

Old Metals.

Wholesale quotations in the Chicago district which should be considered as nominal are as follows: Old steel axles, \$18.00 to \$19.00; old iron axles, \$32.00 to \$33.00; steel springs, \$17.50 to \$18.00; No. 1 wrought iron, \$14.00 to \$14.50; No. 1 cast, \$17.00 to \$17.50; all per net tons. Prices for non-ferrous metals are quoted as follows, per pound: Light copper, 8 cents; light brass, 5 cents; lead, 3 cents; zinc, 3 cents; cast aluminum, 9 cents.

Pig Iron.

The Bessemer and basic pig iron markets have been altogether inactive. No sales of consequence have occurred in the past few days, and indeed there has been practically no inquiry.

While the regular steel works are operating to an extent they have no occasion to buy basic iron, having pigiron in stock or due them, while as to Bessemer iron and steel casting industry is particularly quiet at this time.

It is remarkable that, in view of the prevailing circumstances of the pig iron industry, there is so little expression of discouragement or gloomy forebodings.

In all quarters, faith in the soundness of American institutions and confidence in our national powers of recuperation are freely voiced.

Evidences are not lacking to show that the beginnings of a new momentum of prosperity are felt throughout the manufacturing centers of the country.

It is merely a question of a comparatively short time until the processes of production are again in full operation.

The demand for pig will then tax the resources of the furnaces and the present confidence will receive its reward.

Current Hardware and Metal Prices.

AMERICAN ARTISAN AND HARDWARE RECORD is the only

publication containing Western Hardware and Metal prices corrected weekly.

The prices and discounts quoted on this and the following pages, are, for the most part, subject to change without notice. Owing to the unsettled conditions of the markets and the shortage of materials it is practically impossible for any manufacturer to guarantee his prices for any given length of time.

METALS		HARDWARE	Scratch.	BEVELS, TEE.
			No. IS, socket Handledper doz. 2 56	Stanley's Rosewood handle, new listNet
			No. 344 Goodell-	Stanley iron handleNet
PIG TRON.		ADZES.	Pratt, list less35-40% No. 7 Stanley " 2 25	BINDING CLOTH.
Northern Fdy. No. 2			1101 1 2111110311111	Brass409
Southern Fdy. No. 2 Lake Sup. Charcoal			AXES. First Quality, Single	Brass, plated
Matleable		Barton'sNet	Bitted, 3 to 4 lb., per doz. 16 50	200
		White'sNet	First Quality, Double Bittedper doz. 22 50	Auger. Jennings PatternNe
FIRST QUALITY BRIGHT TIN PLATES		Railroad.	Broad.	Ford CarList plus 59
Per Box IC 14x20112 sheets \$13 10		PlumbsPer doz. 30.00	Plumbs. Can. Pat., 6-ib. 65 00	Ford's Ship " " 59
IX 14x20 sheets		AMMUNITION.	Single Bitted (without handles).	Russell Jenningsplus 209
14x20	16 40	shells, Londed, Peters.	Plumbs, 4%-lb 19 50	Clark's Expansive33 1/4 5 Steer's " Small list, \$22 0059
XXX 14x20		Loaded with Black Powder, 18% Loaded with Smokeless	Plumbs, 4%-lb 23 50	
C 20x28	26 20	Powder18%	nace name was	Irwin Car
XX 20x28 XX 20x28		Winchester.	BAGS, PAPER, NAIL. Pounds 10 16 20 25	
XXX 20x28	35 40	Smokeless Repeater Grade, 15% Smokeless Leader Grade15%	Per 1,000\$5 00 6 50 7 50 9 00	Center109
XXXX 20x28	38 00	Black Powder15%	BALANCES, SPRING.	Countersink.
OOKE PLATES		U. M. C.	Sight SpringNet	No. 18 Wheeler'sper doz. \$2 3 No. 20 " . " 3 6
	\$17 80		StraightNet	American Snailhead " 17
okes, 200 lbs 20x28	18 00	Arrow	BARS, WRECKING	" Rose " 2 0
okes, 214 lbsIC 20x28	18 30	Gun Wada per 1999	V. & B. No. 12\$0.45	Mahew's Flat " 1 6
okes, 270 lbsIX 20x28	20 30	Gun Wads-per 1000. Winchester 7-8 gauge 10&7 1/2 %	V. & B. No. 24 0.75 V. & B. No. 324 0.80	" Snail " 1 9
BLUE ANNEALED SHE	ETS.	" 9-10 gauge 10&7 1/2 %	V. & B. No. 30 0,85	Dowel. Russel Jenningsplus 20%
aseper 100 lbs	\$4 68	11-20 gauge 10a. 7476	V. & B. No. 330 0.90	Gimlet.
		Powder. Each DuPont's Sporting, kegs\$11 25	Clother.	Standard Double Cut Gross \$8 40
ONE PASS COLD ROLL BLACK.	ED	" % kegs 3 10	Small Willowper doz. 15 00	Nail Metal Single CutGross \$4 00-\$5 00
	85 55	DuPont's Canisters, 1-lb 56	Medium Willow " 17 00	
o. 18-20per 100 lbs o. 22-24per 100 lbs		" ¼ kegs 5 75	Large Willow " 20 00	Standard SquareDen. 2 56 American Octagon " 2 56
o. 26per 100 lbs		canisters 1 00	Galvanized. 1 bu. 1½ bu.	Screw Driver.
o. 27per 100 lbs o. 28per 100 lbs		Hercules "E.C", kegs 22 50 Hercules "Infallible", 25-can	Per doz\$16 08 \$18 72	No. 1 Common 46 No. 26 Stanley 76
o. 29per 100 lbs		drums	BEATERS.	
		drums 9 00	Carpet. Per dos. No. 7 Tinned Spring Wire\$1 10	Wood. BLADES, BAW.
GALVANIZED.		Hercules "E.C" and "Infal- lible", canisters 1 00	No. 8 Spring Wire Cop-	Disston 30-in.
o. 16per 100 lbs. o. 18-20per 100 lbs.		Hercules W. A. 30 Cal. Rifle, canisters	pered	Nos6 66 26
o. 22-24per 100 lbs.	6 65	Hercules Sharpshooter Rifle,		BLOCKS.
o. 26per 100 lbs. o. 27per 100 lbs.		Canisters	No. 50 Imp. Dover\$1 10	Wooden20%
o. 28per 100 lbs.		canisters 1 00	110: 102	Patent20%
o, 30 per 100 lbs.	7 60	ANVILS	No. 150 " " kotel 2 10 No. 10 Heavy hotel tinned 2 10	BOARDS, Steve. Per don.
		Solid Wrought23 & 23% per lb.	No. 13 " " 3 30	24x24 13 66
BAR SOLDER		ASBESTOS.	No. 15 " " 3 60 No. 18 " " 4 50	26x26
forso per 100 lbs.	\$25,00	Paper up to 1/1610c per lb. Millboard 3/32 to %10%c per lb.	Hand.	30x30
mmercial.		Corrugated Paper, (250 sq. ft.)\$6,50 per 100 lbs.	Per doz.\$11 50 13 00 14 75 18 00	33×33 25 56
45-55per 100 lbs.		Rollboard	Moulders'.	36x36 30 50
umbers'per 100 lbs.	21.00	AUGERS.	12-inchPer doz. 20 00	Wash.
ZINC.		Boring Machine 40 @ 40&10%	BELLS.	No. 760, Banner Globe, (single)per doz. \$5 38
Slabs	. \$6 00	1	Call.	No. 652, Banner Globe,
		Hollow. Bonney'sper doz, 30 00	3-inch Nickeled Rotary Bell, Bronzed baseper doz. \$5 50	(single)per doz. 6 75 No. 801, Brass King per doz. 8 25
SHEET ZINC.			Cow.	No. 860, Single-Plain
		iwan's Post Hole and Well30%	Kentucky30%	Pump 6 26
	-13 16c	Vaughan's, 4 to 9 in. per doz. \$14.00	Door, Per doz.	BOLTS.
			New Departure Automatic \$7 50 Rotary.	Carriage, Machine, etc.
es than cask lots134		Ship.		
COPPER.		Ship. Ford'sNet	3 -in. Old Copper Bell 6 00	Carriage, cut thread, %x6
copper.		Ford'sNet	3 -in. Old Copper Bell 6 00 3 -in. Old Copper Bell, fancy 8 00	Carriage, cut thread, %x6 and sizes smaller and shorter
COPPER.	.\$.21		3 -in. Old Copper Bell, fancy \$ 00 3 -in. Nickeled Steel Bell 6 00	Carriage, cut thread, %x6 and sizes smaller and shorter
COPPER. pper Sheet, mill base LEAD. nerican Pig	.\$.21	AWLS. Brad. No. 3 Handledper doz. \$0.65	3 -in. Old Copper Bell, fancy \$ 00 3 -in. Nickeled Steel Bell 6 00 3½-in. Nickeled Steel Bell 6 50	Carriage, cut thread, %x6 and sizes smaller and shorter30-10% Carriage, sizes larger and longer than %x620-10-5% Machine, %x4 and sizes
COPPER. pper Sheet, mill base LEAD. merican Pig	.\$.21 .\$5 30 6 05	AWLS. Brad. No. 3 Handledper doz. \$0.65	3 -in. Old Copper Bell, fancy \$ 00 3 -in. Nickeled Steel Bell 6 00 3½-in. Nickeled Steel Bell 6 50	Carriage, cut thread, %x6 and sizes smaller and shorter
COPPER. COPPER. Opper Sheet, mill base LEAD. merican Pig	.\$.21 .\$5 30 6 05	AWLS. Brad. No. 3 Handledper doz. \$0.65 No. 1050 Handled " 1 40 Patent asst'd, 1 to 4 " 35	3 -in. Old Copper Bell, fancy	Carriage, cut thread, %x6 and sizes smaller and shorter
LEAD. merican Pig	.\$.21 .\$5 30 6 05	AWLS. Brad. No. 3 Handledper doz. \$0.65 No. 1050 Handled " 1 40 Patent asst'd, 1 to 4 " 35 Harness.	3 -in. Old Copper Bell, fancy	Carriage, cut thread, %x6 and sizes smaller and shorter
COPPER. COPPER. Opper Sheet, mill base LEAD. merican Pig	.\$.21 .\$5 30 6 05	AWLS. Brad. No. 3 Handledper doz. \$0.65 No. 1050 Handled " 1 40 Patent asst'd, 1 to 4 " 35 Harness. Common " 1 05	3 -in. Old Copper Bell, fancy	Carriage, cut thread, %x6 and sizes smaller and shorter
COPPER. COPPER. Spper Sheet, mill base LEAD. merican Pig	.\$.21 .\$5 30 6 05 \$8 50 8 75	AWLS. Brad. No. 3 Handledper doz. \$0.65 No. 1050 Handled " 1 40 Patent asst'd, 1 to 4 " 35 Harness. Common " 1 05	3 -in. Old Copper Bell, fancy	Carriage, cut thread, %x6 and sizes smaller and shorter

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